PSYCHOLOGICAL ABSTRACTS

Vol. XII, No. 12

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GENERAL

(incl. Statistics)

6144. Anderson, J. E. Proposed constitution of the American Association of Applied Psychologists. J. consult. Psychol., 1938 2, 107-114.—P.S. de Q. Cabol (Simmons).

6145. Bardecki, A. Wzory statystyczne dla użytku psychologów. (Statistical formulae for use by psychologists.) Prace Inst. psychol. Univ. Lwowie, 1937, 1, No. 4. Pp. 21.—The author points out that while psychologists often have occasion to employ statistical techniques, their lack of mathematical experience may render this procedure difficult. To overcome this defect he presents some of the more simple formulae in common usage, together with their methods of application. Included are the methods of "descriptive statistics," the methods of statistical variability, and correlation methods. There is appended a French summary.—F. W. Finger (Brown).

6146. Burk, D. A scientist in Moscow. Sci. Mon., N. Y., 1938, 47, 227-241.—Soviet science and scientific life are described on the basis of recent visits to the U. S. S. R. and experience as a worker in a Moscow laboratory.—O. P. Lester (Buffalo).

6147. Courbon, P. La phonopsychographie. (Phonopsychography.) Ann. méd.-psychol., 1938, 96, Part 2, 67-72.—Phonopsychography is the recording and phonographic reproduction of a mental examination. The author states that it is far superior to a stenographic report, but that the sound motion picture is the technique of the future.—M. B. Mitchell (State University of Iowa).

6148. Drapkin, I. [Ed.] Archivos chilaños de criminologia. (Chilean archives of criminology.) Vol. 1, No. 1, 1938. Santiago, Chile: National Institute of Criminology.—M. E. Morse (Baltimore).

6149. Dunlap, J. W., & Di Michael, S. An abac for determining the mean deviation of a class from the general mean. *Psychometrika*, 1938, 3, 41-43.—The abac is presented with instructions for use.—(Courtesy *Psychometrika*).

6150. Elderton, W. P. Frequency curves and correlation. (3rd ed.) Cambridge, New York: Univ. Press, Macmillan, 1938. Pp. xi + 271. \$3.75.

—This is a revised edition of this text of curvefitting and correlation, which was originally planned for the actuarial profession. In the main body of the book are 13 chapters devoted to:introduction, frequency distributions, method of moments, Pearson's system of frequency curves, calculation, comparison of various systems of curves, correlation,

theoretical distributions and spurious correlations, correlation of characters not quantitatively measurable, standard errors, the test of goodness of fit, the correlation ratio, partial correlation. An appendix of 9 parts is included to provide a briefer course for those interested only in "a knowledge of correlation and probable errors." A list of references and a series of tables are included.—J. McV. Hunt (Brown).

6151. Ellis, W. D. A source book of Gestalt psychology. New York: Harcourt, Brace, 1938. Pp. 403. \$5.00.—An introduction by K. Koffka is followed by translations of selected publications by the following authors: Benary, Duncker, v. Frey, Fuchs, Gelb, Goldschaldt, Goldstein, Hartmann, Hertz, v. Hornbostel, Lewin, Lindemann, Koffka, Köhler, Schulte, Ternus, Wertheimer, Wulf, and Zeigarnik. The topics considered are grouped under the following headings: general problems, perception and organization, perception and movement, perception and related phenomena, animal experiments, thought, psychical forces, and pathologic phenomena. A final section contains a reply by Koffka to Benussi and replies by Köhler to Müller and Rignano.— W. S. Hunter (Brown).

6152. Ennever, W. J. Your mind and how to use it. New York: Doubleday, 1938. Pp. 287. \$2.95.—R. R. Willoughby (Brown).

6153. Essen, J. van. Carl Stumpf, 1848–1936. Ned. Tijdschr. Psychol., 1938, 6, 131–142.—Stumpf was the father of Gestalt psychology as well as of functionalism and structural psychology, and thus the most important of the older psychologists in his influence on contemporary thinking. After the war he applied psychological techniques in the German army and was responsible for the prominence of Berlin as a center of martial psychology. It is unfortunate that after his death no German voice was raised to do him honor. Five pages of classified bibliography.—H. Beaumont (Kentucky).

6154. Galdo, L. Orientamento tecnico-sociale della psicologia. (The technico-social orientation of psychology.) Rif. med., 1937, No. 10, 1-13.—A paper given at the opening of the official course of experimental psychology at the Royal University at Naples.—L. Canestrelli (Rome).

6155. Gesell, A. Scientific approaches to the study of the human mind. Science, 1938, 88, 225-230.—The author points out that psychological advance will be derived from basic, contributory disciplines which deal with subordinate but determining orders of nature. There are at least five fundamental approaches to the comprehensive science of mind: neurophysiology, chemistry, clinical

studies, developmental morphology, and cultural anthropology.—F. A. Mote, Jr. (Brown).

6156. Häussler, F., & Redl, F. Einführung in die Psychologie. (Introduction to psychology.) (2nd ed.) Vienna: Deuticke, 1938. Pp. 160. 4.80 schillings.—This edition, revised by Häussler to conform to the new educational program, is intended for use in secondary schools. The first section deals with the phenomena of consciousness, with special emphasis on the will; the second treats the unconscious (dreams, hypnosis and suggestion, mistakes). The third section is concerned with the "psychic totalities" (ego, person, character, group, mass); the fourth, with animal and child psychology, psychology of primitives, and culture; the fifth, with the metaphysics and theories of the soul, the bodymind problem, and freedom of the will.—F. Häussler (Vienna).

6157. Holzinger, K. J., & Harman, H. H. Comparison of two factorial analyses. Psychometrika, 1938, 3, 45-60.—A bi-factor analysis is made of Thurstone's battery of 57 tests, employing his tetrachoric correlations. Although this analysis is independent of his multiple-factor analysis, a very close agreement is found between the group factors obtained here and Thurstone's verbal descriptions previously published.—(Courtesy Psychometrika).

6158. Honegger, W. Untersuchung über die psychologischen Grundlagen der Mathematik im Anschluss an Proclus Diadochus. (A study on the psychological bases of mathematics according to Produs Diadochus.) St. Gallen: Weiss, 1938. Pp. 83.—R. R. Willoughby (Brown).

6159. Hugenholtz, P. T. Over tijd en tijdsvor-(Time and time forms.) Ned. Tijdschr. Psychol., 1938, 6, 143-161.—This is the first of a series of articles on problems of time. Physical time is eternal, homogeneous and quantitative, and has a single dimension. It is directed from the future to the past and, while it does not influence events, it makes it possible to see them in their causal relationships. Living things have their own time, vital time, which causes them to be in a state of continuous renovation and modification. Its direction is from the past to the future. Animal time is inherent in consciousness, antagonistic to vital time. and directed from the future to the past. It is responsible for our desires, seeking satisfaction in a moment, and drawing the future towards itself as if it were present. The covert human time form can exist only when there is consciousness of self, and makes possible free, spontaneous activities and truly human development.—H. Beaumont (Kentucky).

6160. Huntington, E. V. A paradox in the scoring of competing teams. Science, 1938, 88, 287-288.—
The choice of score is between the sum of the ranks and the sum of the scores of the members of each team. The principle that the relative position of any two teams ought to be determinable on the basis of the actual scores obtained by the members of the teams is not satisfied by the rank method; a table of hypothetical scores and ranks is presented which

indicates that the ranks of teams may be upset by the scores of an individual who is not a member of the teams.—F. A. Mote, Jr. (Brown).

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6161. Jaensch, E. R. Wege und Ziele der Psychologie in Deutschland. (Principles and aims of psychology in Germany.) Z. pädag. Psychol., 1938, 39, 161–181.—This article appeared in revised and expanded form in Amer. J. Psychol., 1937, 50, Nov.—M. E. Morse (Baltimore).

6162. Knight, E. V. M. The golden science series, Book III. London: Univ. London Press, 1937. Pp. 264. 3/-.—This is the third of a series of books intended to cover the needs of a science course for children of 11-14 years of age. Chapters are included on the nervous system and on vision and hearing, and a few remarks are made about other human senses and their functions.—(Courtesy Brit. J. Psychol.).

6163. Kreutz, M. Kausalgesetze als negative Gesetze. (Causal law as negative law.) Actual Sci. Industr., 1937, 7, 102-107.—The causal law does not define strictly what will be the effect of a cause, but it does exclude what is not going to be an effect. Results of this idea concerning cause and effect are related to psychological methodology.—C. N. Cofer (Brown).

6164. Lepley, R. The verifiability of facts and values. Phil. Sci., 1938, 5, 310-320.—The widely held view that facts are verifiable but values are not results from a tendency to take as typical of the former the most determinable and of the latter the least determinable. Both facts and values, however, are found to vary from the rather definitely verifiable to the probably unverifiable; and taken en masse both are perhaps equally verifiable. For absolute verification is impossible in either case, since both involve a relation between an experiencer and objects which are experienced, and both depend upon a process of testing, which in the nature of the case is incapable of completion.—R. H. Dotterer (Pennsylvania State College).

6165. Manoil, A. Bibliografia riguardante la "Scuola di Psicologia" della Università Cattolica di Milano. (Con un supplemento bibliografico delle pubblicazioni di Fr. Agostino Gemelli, O. F. M., nel campo della biologia, fisiologia, istologia, medicina, filosofia, religione, ecc.) (Bibliography on the "School of Psychology" at the Catholic University at Milan, with a supplement by Fr. Agustino Gemelli, in the fields of biology, histology, medicine, philosophy, religion, etc.) Milan: Unione Tipografica, 1938. Pp. 45.—L. Canestrelli (Rome).

6166. Marston, W. M. "You might as well enjoy it." Rotarian, 1938, 53, No. 3, 22-25.—
"Life is short, but it bores many; not so those folk who give their curiosity spur."—R. R. Willoughby (Brown).

6167. Morgan, T. H. Human heredity and modern genetics. Sci. Mon., N. Y., 1938, 47, 315-319.—R. R. Willoughby (Brown).

6168. Powers, F. F., McConnell, T. R., Trow, W. C., Moore, B. V., & Skinner, C. E. Psychology in everyday living. New York: Heath, 1938. Pp. 10 + 511. \$2.75.—The purpose of this book is to introduce important data, principles of psychology, and points of view to students who will probably never become professional psychologists. The authors aim not only to present facts of empirical psychology, but also to show their implications where possible, particularly their application to the life and activity of college students. The book is divided into 5 sections: the nature of psychology; understanding ourselves; adjustment to college and life; learning and study; applications of psychology. A list of questions and references is included in each chapter.—M. Keller (Brown).

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6169. Prescott, C. H. The scientific method and its extension to systems of many degrees of freedom. Phil. Sci., 1938 5, 237-266.—It has been assumed that as we increase the precision of our experiments the errors will decrease. This, however, has not turned out to be true in all cases, for unexpected residua, such as X-rays, quanta, etc., have manifested themselves. As a consequence it has become necessary for scientific theory to take into account added degrees of freedom, which are provided by introducing new parameters. Science, regarded as method, consists essentially in the search for correlations and for relations among correlations. The "explanation" of a correlation is not some fundamental or absolute principle, but some other correlation. Any distinguishable aspect of reality depends on an infinity of parameters, but a scientific theory is necessarily erected on a finite number of independent variables. Thus the art of scientific analysis is to extricate the dominant parameters and to ignore those whose effects are either constant or small. Parsimony requires that the number of parameters be minimized; but when further precision in measurement gives no increase in the accuracy of results, it becomes necessary either to extend the range of investigation or to look for another variable. -R. H. Dotterer (Pennsylvania State College).

6170. Puca, A. I compiti pratici della psicologia scientifica. (The practical tasks of scientific psychology.) Folia med., Napoli, 1937, No. 8, 395-412.—L. Canestrelli (Rome).

6171. Reiher, H. Methoden zur Messung von Schall und Erschütterungen. (Methods of measuring sound and concussion.) Handb. biol. Arb Meth., 1937, Abt. 5, Teil 7, 1931-2015.—This is a detailed discussion of terminology, apparatus, and methods of investigation used in acoustics. The article is followed by a detailed index pertaining to the whole of Teil 7 of Abt. 5 of the Handbuch. This Teil 7 describes methods used in the investigation of the individual organs of the animal organism.—Z. Piotrowski (Columbia).

6172. Rijnberk, G. van. Die Herstellung eines praktisch vollkommen geräuschlosen Raumes. (The building of a practically sound-proof chamber.) Handb. biol. Arb Meth., 1937, Abt. 5, Teil 7, 1661-

1676.—The author describes in detail the materials used in the building of the "camera absolute silenta" of the Physiological Laboratory of the University of Amsterdam.—Z. Piotrowski (Columbia).

6173. Ryans, D. G. The major observable dimensions of behavior. J. gen. Psychol., 1938, 19, 65-77.—In a delimiting discussion of the sort of behavior which psychology studies, the author attempts an "inclusive and exclusive description of psychology." The definition: "Psychology may be defined as the study of conditions and changes of that observable organismic behavior, both direct and symbolic, which is capable of variation through the 'stimulus-response, connecting process' known as learning or acquiring. The direction and extent of variation seem to be conditioned by (1) the stimulus situation, and (2) individual aptitude, persistence, and response to determinants of energy release in the organism."—E. D. Hunt (Brown).

6174. Sellars, R. W. An analytic approach to the mind-body problem. Phil. Rev., 1938, 47, 461-487. -An adequate physiology built up to cover the facts about organic behavior in relation to environment is just beginning to appear. Little is yet known about the brain, but there is a fading away of too simple mechanical notions. The author holds that the self is the organism. We have two kinds of knowledge about it: (1) behavioral, physical, external knowledge, and (2) self-knowledge which is not reducible to external observation. The verbal solutions of traditional materialism were epistemologically naïve. To the critical physical realist the term epiphenomenon is a monstrosity. This author interprets mind as the emergent abilities of the organism dominantly located in the brain. He has no doubt of their causal efficacy. Scientific knowledge never makes contact with any kind of literal causal efficacy. In consciousness alone we are on the inside of nature, inside immanent or functional causality.-M. F. Martin (West Springfield, Mass.).

6175. Skramlik, E. v. Verfahren zur Prüfung der Leistungen des Geruchssinnes. (Methods for the investigation of the olfactory sense.) Handb. biol. ArbMeth., 1937, Abt. 5, Teil 7, 1677-1726.—A methodical presentation of problems in the field of the olfactory sense and of methods and apparatus used in the solution of these problems. The description of the apparatus is logically linked with scientific problems.—Z. Piotrowski (Columbia).

6176. Skramlik, E. v. Neue Verfahren zur Prüfung der Leistungen des Geschmackssinnes. (New methods for the investigation of the gustatory sense.) Handb. biol. Arb Meth., 1937, Abt. 5, Teil 7, 1727-1774.—A technical article describing the methods and apparatus used in the study of the gustatory sense. It is divided into seven chapters, discussing methods and instruments devised for the study of: (1) distribution of fungiform papillae of the tongue, (2) selection of proper tasting material, (3) effects of gustatory stimuli, (4) after-taste, changes, contrast, and inhibitory phenomena in the

gustatory sensory field, (5) the role played by the different parts of the gustatory sense, (6) differentiation in thresholds of gustatory sensation, and (7) localization of gustatory sensations.—Z. Piotrowski (Columbia).

6177. Skramlik, E. v. Neue Verfahren zur Erforschung der Leistungen des Druck-, Temperatur-, Schmerz- und Kraftsinnes. (New methods for the investigation of the senses of pressure, temperature, pain, and force.) Handb. biol. Arb Meth., 1937, Abt. 5, Teil 7, 1775–1828.—A special chapter is devoted to the technical and detailed description of methods and apparatus used in the study of the qualities of each of the four senses named.—Z. Piotrowski (Columbia).

6178. Skramlik, E. v. Verfahren zur Prüfung der haptischen Leistungen. (Methods for the investigation of haptic sensations.) Handb. biol. Arb Meth., 1937, Abt. 5, Teil 7, 1829-1929.—The author uses the term "haptic sensation" to denote the combined kinesthetic and cutaneous sensations. The greater part of the chapter is devoted to the study of the sense of touch, and another part to an analysis of grasping.—Z. Piotrowski (Columbia).

6179. Steen, H. Das Leib-Seele Problem in der Philosophie Hollands im 19. und 20. Jahrhundert. I. Die Behandlung des Leib-Seele Problems in der monistischen Metaphysik. (The mind-body problem in the philosophy of Holland in the 19th and 20th centuries. I. The treatment of the mind-body problem in monistic metaphysics.) Ned. Tijdschr. Psychol., 1938, 6, 187-206.—This section discusses the Hegelian G. P. J. Bolland. He considered a living organism the unity of mind and body. As the mind is the entelechy of its body, so the body is the reality of the mind. The latter exists only in the body, not without it, and is not immortal. Hence the mind-body problem ceases to exist for Bolland and becomes a philosophical absurdity.—H. Beaumont (Kentucky).

6180. Stevens, W. L. The distribution of entries in a contingency table with fixed marginal totals. Ann. Eugen., Camb., 1938, 8, 238-244.—The problem investigated is the expectation and standard error of the number of correct guesses, when the numbers of each object presented, of each object guessed, and of blank records are all fixed by investigations. The mean, variance, and covariance are determined for single cell entries and for sub-totals of the cell entries of a contingency table. Finally, the significance of the number of correct guesses is determined. An example based on 50 playing cards and 5 subjects is worked out.—J. W. Dunlap (Rochester).

6181. Thurstone, L. L. The perceptual factor. Psychometrika, 1938, 3, 1-17.—A further study of the perceptual factor, previously isolated in a factor analysis of a battery of 56 tests, is made in a manner designed also to determine whether the same 7 primaries would be found in a different population of subjects and with another battery of tests. The tests are described and the results of the analysis are given in detail. Much attention is given to the

matter of the orthogonality of primary factors and to their psychological meaningfulness.—(Courtesy Psychometrika).

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6182. Tizzano, A. Alcune applicazioni della statistica in biologia. (Some applications of statistics to biology.) Riv. Patol. sper., 1937, 3, 475–489.—
The author reviews various applications of the statistical method used in the biological field for group phenomena or for experiments repeated in order to obtain data for frequency curves.—L. Canestrelli (Rome).

6183. Varnum, W. C. Group experiments in psychology. Los Angeles: Gutenberg Press, 1937. Pp. 9 + 147. \$1.00.—This manual and study guide includes directions for 25 group experiments, space for recording experimental findings, questions on required readings, and extra-credit assignments. —M. Keller (Brown).

6184. Wallin, J. E. W. The establishment of the clinical section of the American Psychological Association. Sch. & Soc., 1938, 48, 114-115.—Contrary to incorrect statements frequently made of late, the clinical section of the A. P. A. was in no way an outgrowth of the work of the army psychologists, nor was it founded by any of the people who were associated with that work during the world war. With the object of raising the standards of qualification and the professional status of clinical psychologists, a group led by Leta Hollingworth met in 1917 at the A. P. A. meeting in Pittsburgh. Formal organization did not occur until 1920, when it was decided that it should be a section of the A. P. A.—M. Lee (Chicago).

6185. Wigert, V. Bror Gadelius. Acta Psychiat., Kbh., 1938, 13, 125-129.—Brief obituary of the leading Swedish psychiatrist, who died April 12, 1938. Portrait.—M. L. Reymert (Mooseheart Laboratory for Child Research).

6186. Wilks, S. S. Weighting systems for linear functions of correlated variables when there is no dependent variable. Psychometrika, 1938, 3, 23-40.

—When no criterion variable is available, the combination of tests or other variables by the use of multiple correlation is not possible. Three methods of combining variables are described mathematically, and discussed with reference to the linear combination of tests. Iterative computational schemes are outlined and illustrated.—(Courtesy Psychometrika).

on "Reich der Seele." (Discussion and review of The Realm of the Soul.) Zbl. Psychotherap., 1938, 10, 239-278.—A résumé and favorable discussion of Heyer and Seifert's two volumes of this title. Wolff considers them an extraordinarily important exposition of present-day German psychology for non-Germans.—M. E. Morse (Baltimore).

6188. Woodworth, R. S. Experimental psychology. New York: Holt, 1938. Pp. 889. \$3.80.—The present treatise, written from an eclectic systematic point of view, stays close to experimental findings and the immediate theories arising there-

from. Primary emphasis is placed upon contributions made by psychologists. The fields covered and the relative space allotted to each may be indicated as follows: memory, 45 pages; retention, 19; memory for form, 23; conditioned response, 32; maze learning, 32: practice and skill, 20; transfer of training, 32; economy and interference, 26; feeling, 8; expression of emotions, 15; bodily changes in emotion, 19; "psychogalvanic reflex," 22; reaction time, 42; association, 28; experimental esthetics, 24; psychophysical methods, 36; results in psychophysics, 22; skin senses, 27; smell and taste, 24; hearing, 38; sight, 37; eye movements, 19; perception of color, 28; perception of form, 28; visual space, 33; attention, 29; reading, 33; problem solving behavior, 37; and thinking, 42 pages. There is a bibliography of 35 pages.—W. S. Hunter (Brown).

6189. Young, G., & Householder, A. S. Discussion of a set of points in terms of their mutual distances. Psychometrika, 1938, 3, 19-22.-Necessary and sufficient conditions are given for a set of numbers to be the mutual distances of a set of real points in Euclidean space, and matrices are found whose ranks determine the dimension of the smallest Euclidean space containing such points. Methods are indicated for determining the configuration of these points, and for approximating them by points in a space of lower dimensionality.-(Courtesy Psychometrika).

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6190. Zeddies, A. Von der Macht des Seelischen. Psychological sketches.) (The power of the spiritual. Psychological sketches.) Bad Homburg: Siemens-Verlagsges., 1938. Pp. 47. RM 1.50.—R. R. Willoughby (Brown).

6191. Zubin, J. Socio-biological types and methods for their isolation. Psychiatry, 1938, 2, 237-247. —"A technique has been described for subdividing a group into subgroups of like-structured or likepatterned individuals, and for determining the factors that make them like-structured. An application of the method to the determination of personality patterns has been described. The technique is applicable to other fields such as sociology, vital statistics, institutional statistics and economics."-M. Grotjahn (Chicago Institute for Psychoanalysis).

[See also abstracts 6494, 6510.]

NERVOUS SYSTEM

6192. Abbie, A. A. The excitable cortex in the Monotremata. Aust. J. exp. Biol. med. Sci., 1938, 16, 143-152.-(Biol. Abstr. XII: 8018).

6193. Andrew, W. The Purkinje cell in man from birth to senility. Z. Zellforsch., 1938, 28, 292-304.-P. L. Krieger (Leipzig).

6194. Axmacher, F. Die Steigerung der spinalen Reflexerregbarkeit durch Methylimidazol. (The intensification of spinal reflex excitability by methylimidazol.) Arch. exp. Path. Pharmak., 1937, 185, 707-731.—P. L. Krieger (Leipzig).

6195. Bishop, G. H. Potentials of the fiber components of the coeliac nerve of the bullfrog. J. cell. comp. Physiol., 1937, 9, 417-428.-The conduction pathways from the anterior sympathetic trunk and the 4th nerve trunk and ganglion were traced by the recording of the action potentials into the coeliac nerve and its branches: from the 4th roots to the 4th nerve, and from the 7th and 8th roots to their nerves and rami. The preganglionic sympathetic supply for the peripheral nerve of each level arises from roots at least one segment higher, and these fibers form synapses in the sympathetic ganglion corresponding to the peripheral nerve. The details of the A, B, and C fibers are described .-O. W. Richards (Spencer Lens Company).

6196. Bonnet, V. Etude oscillographique de l'activité électrique spontané de la cellule nerveuse des crustacés. (Oscillographic study of the spontaneous electrical activity of crustacean nerve cells.) C. R. Soc. Biol., Paris, 1938, 127, 798-803.—These studies on the electrical manifestations of spontaneous ganglionic activity in the crayfish and the lobster reveal the existence of a neural automatism which represents synchronized rhythmic pulsations of the nerve cells at rest. Stimulations above the minimum necessary to maintain the cell's automatism start a new complex rhythm. This would explain the absence of waves of low frequency in the esophageal ganglia of crustaceans, where the ganglia are continuously traversed by incoming impulses.—G. Goldman (Sorbonne).

6197. Brown, G. L., & Harvey, A. M. Neuro-muscular conduction in the fowl. J. Physiol., 1938, 93, 285-300.—M. A. Rubin (Worcester State Hospital).

6198. Cowan, S. L. The action of eserine-like and curare-like substances on the responses of frog's nerve-muscle preparations to repetitive stimulation. J. Physiol., 1938, 93, 215-262.-M. A. Rubin (Worcester State Hospital).

6199. Curtis, H. J., & Cole, K. S. Transverse electric impedance of the squid giant axon. J. gen. Physiol., 1938, 21, 757-766.—M. A. Rubin (Worcester State Hospital).

6200. Dewulf, A. Une nouvelle méthode d'imprégnation des neurofibrilles. (A new method of staining neurofibrils.) J. belge Neurol. Psychiat., 1938, 38, 407-410.—The author describes in detail a new method of staining neurofibrillary tissue with a solution of silver nitrate after fixation with formol and ammonium bromide. This technique is simple, quick, and permanent, and makes it possible to obtain a clear picture of the condition of the neurones of the nervous centers. 12 microphotographs are given.—H. Syz (Cornell).

6201. Dusser de Barenne, J. G., McCulloch, W. S., & Nims, L. F. Functional activity and pH of the cerebral cortex. J. cell. comp. Physiol., 1937, 10, 277-289.—The pH was obtained with a glass electrode and the records with the simultaneous electrocorticogram were made optically. Hyperventilation or the

injection of sodium bicarbonate resulted in an "alkaline" reaction of the cortex of the curarized macaque. Hypoventilation or injection of dilute acid gave the opposite reaction. Increased pH gave increased excitability and accounted for the observed changes in electrical activity of the cortex. After-discharge results in decreased pH at the site of the after-discharge, whether induced by direct electrical stimulation or neurally by a disturbance propagated from a distance.—O. W. Richards (Spencer Lens Company).

6202. Goldman, G., Segal, J., & Segalis, M. L'action d'une excitation intermittente sur le rythme de Berger. (The effect of intermittent stimulation on the Berger rhythm.) C. R. Soc. Biol., Paris, 1938, 127, 1217-1220.—Synchronism of the Berger rhythm and an intermittent stimulus is observed not only at a frequency of about 10 cycles, but each time that the stimulus frequency is in a simple relation to the autonomous rhythm the waves appear at their proper frequency. Thus Berger waves may be aroused by frequencies of 3.3, 5, 10, 20, 30, 40 and 50 cycles, the intermediate ones giving interference figures which may at times be resolved into two initial waves. Assuming that this phenomenon is favored by an increase in intensity as well as by the surface of the fluctuating region, one need not speak of a spatial opposition of the waves of repose and the on-effect, but rather of a true interference at the level of the cortical sensory neurones. One must conclude that the alpha waves represent a permanent activity of the optic centers. This activity is modified by an asynchronous influx, but it appears as interference forms when these latter are synchronized by flicker.-G. Goldman (Sorbonne).

6203. Häfner, K. Eine Methode zur Bestimmung der Chronaxie des Schmerzes. (A method for the determination of the chronaxy of pain.) Ludwigshafen a. Rh.: Waldkirch, 1937. Pp. 11.—R. R. Willoughby (Brown).

6204. Heinbecker, P., Bishop, G. H., & O'Leary, J. L. Functional and histologic studies of somatic and autonomic nerves of man. Arch. Neurol. Psychiat., Chicago, 1936, 35, 1233-1255.—(Biol. Abstr. XI: 18712).

6205. Hess, W. R. Das Zwischenhirn und die Regulation von Kreislauf und Atmung. (The diencephalon and regulation of circulation and respiration.) Leipzig: Thieme, 1938. Pp. 127. RM. 26.—R. R. Willoughby (Brown).

6206. Jasper, H. H., & Monnier, A. M. Transmission of excitation between excised non-myelinated nerves. An artificial synapse. J. cell. comp. Physiol., 1938, 11, 259-277.—Two small groups of crustacean nerve fibers dissected from a limb nerve trunk were placed in partial contact in the form of a T. Action potentials recorded with a special amplifier-oscillograph showed no interference and were independent of each other. Local chemical stimulation of one nerve ending set up sustained impulses that were transmitted to the other nerve in contact with it. The delay at this artificial synapse was of

the order of 20 milliseconds. The stimulation of the second nerve in contact with the nerve directly stimulated is attributed to a change in the ionic balance at the surfaces of the nerves in contact with each other.—O. W. Richards (Spencer Lens Company).

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6207. Jones, T. Neurogenesis and the development of "synapses," with particular reference to the conditions in Lepidosiren paradoxa. J. ment. Sci., 1938, 84, 451-494.—A detailed, developmental study of neural histology and anatomy in Lepidosiren paradoxa, concerned especially with "the early appearance of nervous structures at situations as far as possible removed from their supposed site of origin (i.e., the neural tube)," is accompanied by an historical and critical review of theories of neurogenesis. Plates, diagrams, and bibliography.—C. J. Herrick (Pennsylvania).

6208. Klaue, R. Die bioelektrische Tätigkeit der Grosshirnrinde im normalen Schlaf und in der Narkose durch Schlafmittel. (The bio-electric activity of the cerebral cortex in normal and druginduced sleep.) J. Psychol. Neurol., Lpz., 1937, 47, 510-531.—Electrical activity from seven cortical fields in the cat was recorded in the waking state, in normal sleep, and in sleep induced by chloral hydrate and veronal. Characteristic differences appeared in each case. Normal sleep was marked by two distinct stages-one of heightened electrical response at the onset of sleep, followed by one of subnormal activity as the depth of sleep increased. Narcotically induced sleep did not show these stages at any time, but presented distinctive activity that varied with the dosage of drugs and brain area involved. A relation is pointed out between the findings for spontaneous sleep and those for muscle tonus in normal and hypnotically-induced sleep (0. Vogt).- F. S. Keller (Columbia).

6209. Körner, F. Variationsstatistische Untersuchungen über die Grösse der Kerne und der Kernkörperchen menschlicher Nervenzellen. (Statistical studies on variations in size of the nuclei and nucleoli of human nerve cells.) Z. mikr.-anat. Forsch., 1937, 42, 81-115.—P. L. Krieger (Leipzig).

6210. Lindsley, D. B. Foci of activity of the alpha rhythm in the human electro-encephalogram. J. exp. Psychol., 1938, 23, 159-171.-By means of two matched amplifying and recording systems, brain potentials were recorded simultaneously from adjacent areas along longitudinal and horizontal planes of the head in 16 subjects. Analysis of phase relationships of the alpha waves from adjacent areas shows four separate foci of activity of the alpha rhythm in each cerebral hemisphere. Two of the foci are located over the occipital region, a third over the anterior part of the parietal area, and a fourth over the temporal region. In addition to phase relationships, other indications of multiple foci were found, such as independent variations in the pattern and magnitude and frequency of the alpha waves recorded from different regions of the brain. This indicates that the alpha rhythm of each region has a separate origin. It is suggested that the foci of activity may be associated with thalamocortical projections which exercise a controlling influence on the "spontaneous" rhythms of the cortex.—H. W. Karn (Pittsburgh).

6211. Lloyd, D. P. C. The transmission of impulses by ganglionic direct fibers. J. Physiol., 1938, 93, 86-89.—It is shown that the presence of a collateral does not affect the transmission of preganglionic impulses through a sympathetic ganglion.—M. A. Rubin (Worcester State Hospital).

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6212. Lungwitz, W. Zur myeloarchitektonischen Untergliederung der menschlichen Area praeoccipitalis (Area 19 Brodmann). (The myeloarchitectonic sub-structure of the human preoccipital area—Brodmann's area 19.) J. Psychol. Neurol., Lpz., 1937, 47, 607-638.—Examination of the preoccipital area of the human cortex discloses three principal subdivisions, histologically discriminable, the boundaries and component parts of which are described and illustrated in detail.—F. S. Keller (Columbia).

6213. McSwiney, B. A., & Suffolk, S. F. Segmental distribution of certain visceral afferent neurones of the pupillo-dilator reflex in the cat. J. Physiol., 1938, 93, 104-116.—M. A. Rubin (Worcester State Hospital).

6214. Mellanby, E. Nerve degeneration and bone hypertrophy induced in young animals by diet. J. Physiol., 1938, 93, 42-43P.—In young dogs, diets deficient in vitamin A and rich in cereals caused degeneration of the eighth nerve, often resulting in deafness. An overgrowth of bone of the labyrinthine capsule and elsewhere in the skull was also found.—M. A. Rubin (Worcester State Hospital).

6215. Pern, S. Relationship between the autonomic nervous system and disease. Med. Rec., N. Y., 1938, 148, 142-144.—Health is a function of the balanced working of the sympathetic system, which governs the destruction of organisms, with the parasympathetic system, which governs the elimination of toxins. Lag in one system leads to failure of the other. Failure of the sympathetic may lead to allergies and anaphylaxis, which can be benefited by adrenalin, while failure of the parasympathetic may lead to inflammatory reactions, which can be corrected by acetylcholine or histamine. Apparently the two great driving forces within the autonomic nervous system are adrenalin, supplemented by histamine, and acetylcholine, supplemented by an esterase.—M. H. Erickson (Eloise Hospital).

6216. Prosser, C. L., & Chambers, A. H. Excitation of nerve fibers in the squid (Loligo pealii). J. gen. Physiol., 1938, 21, 781-794.—M. A. Rubin (Worcester State Hospital).

6217. Quercy, P., & Lachaud, R. de. Recherches histologiques sur les voies optiques. Le chiasma optique d'un borgne. (Histological studies on the optic pathways. The optic chiasma in a one-eyed subject.) Encéphale, 1938, 33, 73-76.—G. Goldman (Sorbonne).

6218. Richard, A. Etude du mécanisme d'action de la quinine sur le système nerveux. (A study on the mechanism of the action of quinine on the nervous system.) C. R. Soc. Biol., Paris, 1938, 127, 1232-1234.—Using chronaximetric measurements, the author found on injecting average doses of quinine hydrochloride (0.03 gr. per kgr.) into the veins or the peritoneum of dogs that the quinine had no effect on the nerve centers. Stripped of all psychomotor action, the quinine disturbs the coordination of movements through a labyrinthine reflex mechanism.—G. Goldman (Sorbonne).

6219. Sjöqvist, O. Studies on pain conduction in the trigeminal nerve. A contribution to the surgical treatment of facial pain. Acta Psychiat., Kbh., 1938, Suppl. 17. Pp. 139.—This study comprises a fiber analysis of the trigeminal nerve root and bulbospinal tract, studies on degeneration of the bulbospinal fifth tract following surgical interference with the root, and a description of the new operative procedure for the relief of facial pain in 9 clinical cases. The role played by the facial and intermediate nerves and by the sympathetic system is discussed, and it is pointed out that the end stations for afferent fibers from both the facial nerve and the cervical sympathetic must be situated in close proximity to the bulbospinal trigeminal nucleus. One main result seems to be that deep pressure pain in the face may be extinguished by section of the spinal trigeminal tract. Brief summaries in English, Swedish, German, and French. Extensive bibliography.-M. L. Reymert (Mooseheart Laboratory for Child Research).

6220. Strasburger, E. H. Die myeloarchitektonische Gliederung des Stirnhirns beim Menschen und Schimpansen. I. Teil. Myeloarchitektonische Gliederung des menschlichen Stirnhirns. II. Teil. Der Faserbau des Stirnhirns beim Schimpansen. (The myeloarchitectonic structure of the frontal lobe in man and chimpanzee. I. Myeloarchitectonic structure of the human frontal lobe. II. Structure of the frontal lobe in chimpanzees.) J. Psychol. Neurol., Lpz., 1937, 47, 461-491; 565-606.-The first of these two copiously illustrated reports outlines the technique of examination and mapping employed and gives a detailed description of the structure of a human frontal lobe (right hemisphere); the second includes, in addition to a description of the same lobes (left hemisphere) in two chimpanzees, a comparison of the human and anthropoid brain areas, and a discussion of related investigations (particularly those of O. Vogt).—F. S. Keller (Columbia).

6221. Titeca, J. Etude électrencéphalographique de deux cas d'anesthésie hystérique. (Electroencephalographic study of two cases of hysterical anesthesia.) J. belge Neurol. Psychiat., 1938, 38, 442-478.—In two carefully diagnosed cases of hysterical anesthesia (detailed histories given) normal brain-potential reactions could not be elicited by stimulation of the affected parts. It is suggested that hysteria is a functional isolation of certain nerve

centers. Reproductions of the encephalograms and an extensive bibliography are presented.—H. Syz (Cornell).

6222. Vilter, V. Recherches histologiques et physiologiques sur la fonction pigmentaire des sélaciens. (Histological and physiological studies on the pigmentary function in selacians.) Bull. Stat. biol. Arcachon, 1937, 34, 65-136.—Pigmentary physiomorphology in selacians can be explained by a sympathetico-hypophyseal visual regulation. This visual pigmento-motor control is clearly inhibitory. The physiological visual pathways of this hypophyseal activation are not yet known. Bibliography and plates.—G. Goldman (Sorbonne).

6223. Walker, A. E. The primate thalamus. Chicago: Univ. Chicago Press, 1938. Pp. 344. \$3.00.—R. R. Willoughby (Brown).

6224. Weyrauch, W. Weiteres über den Internodialablauf als Ausdrucksbewegung (bei Arthropoden). (Further data on internodal course as expressive movement in arthropods.) Zool. Jb., Abt. 1, 1936/37, 69, 240ff.—P. L. Krieger (Leipzig).

6225. Young, J. Z. Synaptic transmission in the absence of nerve cell bodies. J. Physiol., 1938, 93, 43-45P.—Synaptic excitation of one nerve fiber by another does not depend on any of the substances (nucleus, Golgi bodies, etc.) present in the cell body.—M. A. Rubin (Worcester State Hospital).

6226. Zermahr, E. Beitrag zu den Reizleitungsstörungen. (Contribution on disturbances of stimulus conduction.) Speyer a. Rh.: Pilger-Druckerei, 1938. Pp. 32.—R. R. Willoughby (Brown).

6227. Zottermann, Y. Specific action potentials in the lingual nerve of the cat. Skand. Arch. Physiol., 1936, 75, 105-119.—"Action potentials set up by cooling, warming and burning the tongue of a cat have been recorded in preparations of the lingual nerve. It has been found that these three modes of stimulation elicit specific action potentials which are distinguished from each other by differences in the spike heights and in the rate of conduction. The relative spike heights of the cold, heat and pain potentials are generally 1/9, 1/5 and 1/9 respectively of those of the largest touch potentials, which indicates that the fibers have diameters which are 1/3, 1/24 and 1/3 respectively of those of the touch fibers. The action potentials recorded in response to noxious stimulation of the tongue have forms which are very similar to those recorded by Adrian (1931) and Zottermann (1933) from cutaneous nerves of the frog when the skin was exposed to noxious stimuli."-P. L. Krieger (Leipzig).

[See also abstracts 6229, 6262, 6264, 6275, 6276, 6279, 6322, 6338, 6419, 6430.]

RECEPTIVE AND PERCEPTUAL PROCESSES

6228. Adamtzik, K. H. Über die Geschmackswirkung von anorganischen Doppelsalzen. (The taste effect of inorganic double salts.) Jena: (Phil. Diss.), 1936. Pp. 36.—P. L. Krieger (Leipzig).

6229. Ajuriaguerra, J., & Daumezon, G. Douleurs centrales d'origine bulbo-protubérantielle. (Central pain of bulbo-protuberantial origin.) Encéphale, 1938, 33, 77-96.—This is a critical review of pain theories, none of which satisfactorily explains bulbo-protuberantial pathology, where the symptomatology is similar to that of crossed sensory disorders in syringomyelia, ranging from slight paresthesias to extreme pain.—G. Goldman (Sorbonne).

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6230. Bagh, K. v. Über die Beeinflussing der gestörten Schmerz- und Berührungssensibilität durch Hautreize anderer Qualität. (The influence of other modalities of skin stimulation on disturbed pain and touch sensibility.) Dtsch. Z. Nervenheilk., 1938, 146, 170–181.—Sensitivity to pain can be either increased or decreased by stimulation of the paths of the pressure sense. Nevertheless, the author cannot give up the view of specific conduction of the various modalities of skin sensation. He considers it much more probable that under pathological conditions there is in the sensory ganglia and nuclei an interchange among paths which conduct stimuli of different modalities.—P. L. Krieger (Leipzig).

6231. Berger, C., & Buchthal, F. Formwahrnehmung und Funktion der Fovea. (Function of the fovea and perception of form.) Skand. Arch. Physiol., 1938, 79, 15-26.—In 3 subjects the distance was determined at which the form of self-illuminated figures on a dark background and black figures on an illuminated background could be clearly distinguished, and at which they faded out. The ability to distinguish them decreased with increasingly complicated form (number of angles), thus demonstrating a relationship to the structure of the fovea. Perception of form was better with greater illumination of the retinal image than near the threshold of brightness. All the functional units of the fovea are not in action continuously: only a part (probably ½) are stimulated in rotation, while the remainder are in the refractory phase. The improvement in form perception is explained by a shortening of the refractory period, which brings more units into function in a field during a given time.-P. L. Krieger (Leipzig)

6232. Bernovits, M. Über das Richtungshören der Blinden. (Determination of the direction of sound by the blind.) Mschr. Ohrenheilk., 1936, 70, 984–986.—40 blind Hungarians between 13 and 18 years of age, with normal hearing, were studied by Rejtö's method for the sighted, with the use of Bárány's noise apparatus and a c⁴ tuning fork. Head movements were allowed in some experiments and prevented in others. Blind persons' eyes move in the direction of the source of sound. They succeed better than the sighted in determining its direction, doubtless because of their greater unconscious practice. Attention and intelligence also play a part.—P. L. Krieger (Leipzig).

6233. Beskow, A. Die Bedeutung des Fusionsapparates für die motorische Koordination der

Augen bei seitlicher Blickrichtung. (The importance of the fusion apparatus for motor co-ordination of the eyes in looking laterally.) Acta med. scand., 1938, 93, 601-612.—Beskow determined in 14 persons the position in the visual field where diplopia appeared both under normal conditions and when the fusion capacity was reduced by alcohol. In the second case diplopia usually appeared (in a lateral direction of the gaze) earlier than in the first case. Nevertheless the difference was generally insignificant. In the exceptional case, however, one may suspect that a reduction in fusion power may contribute to self-observation of this variety of diplopia. On the other hand, these experiments show to what an extent a person may fail to perceive a diplopia arising from an anomaly of position .- P. L. Krieger (Leipzig).

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6234. Child, I. L., & Wendt, G. R. The temporal course of the influence of visual stimulation upon the auditory threshold. J. exp. Psychol., 1938, 23, 109-127.—This study concerned the influence of a flash of light upon the audibility threshold for an accompanying tone. When the light and tone were simultaneous, or when the light preceded the tone by half a second or one second, there was a reliable increase in the frequency with which the nearthreshold tones were reported as heard; the maximum effect was found when the light preceded by half a second. When the light followed the tone by half a second, the facilitating effect was absent in the first two experimental days, but reliably present in the last two days. When the light preceded the tone by two seconds there was no consistent facilitating effect.-H. W. Karn (Pittsburgh).

6235. De Cigna, V. L'audizione nei rumori assordanti. (Audition under conditions of deafening noise.) Liguria med., 1936, No. 8, 163-165.—The author suggests a device (the complete closing of the auditory ducts on both sides of the head) in order to ameliorate the hearing of sounds under conditions of continual deafening noises. The device relies on bone transmission of sound.—L. Canestrelli (Rome).

6236. Denker, A. Zur Anatomie und Funktion des Labyrinths der Meerbrassen (Sparidae). (The anatomy and function of the labyrinth in the sea bream.) Arch. Ohr.-, Nas.- u. Kehlkheilk., 1938, 144, 417-424.—These fish showed no capacity through training to hear the tones c³ and a³. This agrees with Holst's results. Experiments with deeper tones are indicated, since the upper limit of hearing in these fishes may be below c³.—P. L. Krieger (Leipzig).

6237. Eames, T. H. The ocular conditions of 350 poor readers. J. educ. Res., 1938, 32, 10-16.— More than half of the group exhibited refractive errors of more than .50 diopters and more than a third had errors of more than 1.00 diopter. Coordination of the eyes, fusion and duction, central visual fields, and lateral dominance were also studied, and in each case more than the average number of errors were found.—S. W. Fernberger (Pennsylvania).

6238. Farkas, B. Über den schallleitenden Apparat der Knochenfische. I. Fenestra sacculi, Protoperculum und Protocolumella bei Lebistes reticulatus Pet. (The sound-conducting mechanism of teleosts. I. Fenestra and associated structures in the guppy.) Z. Morph. Okol. Tiere, 1938, 34, 367-415.-Neither skin nor swim bladder can explain a perception of sound. The 3 constituents of the amphibian hearing mechanism, the fenestra vestibuli, operculum, and columella, were observed in Lebistes; they conform to the phyletic structure of teleosts. The fenestra sacculi lies between the pteroticum and the base of the skull in the form of cracks and fissures arranged in an oval ring. The fenestra is filled with cartilage differing in composition and color from the rest of the base of the skull. This structure was named the protoperculum. Through both run fibers whose function is to conduct vibration; they penetrate into the otolith. This is fixed, and damps the effect of mechanical stimuli, protecting the macula beneath. Through the fibers it preserves undisturbed conductance to the sensory ending. The sacculus in Lebistes is related to the blood vessels by a network of fibers. The labyrinth thus has physiological influence upon the blood vessels, whose walls may also conduct sound.-P. L. Krieger (Leipzig).

6239. Franceschetti, A. Vererbung und Auge. (Heredity and the eye.) Z. Augenheilk., 1938, 94, 329-341.—The author quotes about a hundred pertinent works from various countries.—P. L. Krieger (Leipzig).

6240. Geiseler, W. Akustische Untersuchungen an Knallen. (Acoustical investigations on sharp reports.) Berlin: (Phil. Diss.), 1937.—P. L. Krieger (Leipzig).

6241. Gray, J. Pseudo-rheotropism in fishes. J. exp. Biol., 1937, 14, 95-103.—This paper reports experiments on the behavior of blinded goldfish, sticklebacks, eels, and Xenopus laevis placed in a circular channel of water rotated on a turn-table. All species reported on were found insensitive to rectilinear displacements, but responded to passive curvilinear motion involving rotation about one of the major axes of the body: the animal maintained its position in space by moving along a curved path in a direction opposite to that of the passive rotation. The response is considered to be determined by the semi-circular canals. When a fish is displaced head first by a rotary current of water, overcompensating rotation occurs as the fish comes in contact with a solid surface. The solid surface does not have this effect when the fish is oriented upstream. No evidence of true rheotropism was found in any of the species tested. 8 references.-C. K. Trueblood (Harvard).

6242. Harman, B., Sorsby, A., & others. Discussion on the problem of myopia. Trans. ophthal. Soc. U. K., 1937, 57, 366ff.—R. R. Willoughby (Brown).

6243. Hecht, S., & Mandelbaum, J. Rod-cone dark adaptation and vitamin A. Science, 1938, 88,

219-221.—The dark adaptation of 4 normal subjects on their regular diet was measured. They were then fed a diet containing only about 150 units of vitamin A and the measurements again made. The results show that the deficient vitamin A diet raised the general intensity level of both rods and cones, confirming previous suggestions and studies which indicated that the vitamin is necessary for both retinal elements.—F. A. Mote, Jr. (Brown).

6244. Henry, F. M. Audition in the white rat. III. Absolute and relative intensity thresholds. J. comp. Psychol., 1938, 26, 45-62.-The absolute auditory thresholds of 22 white rats for pure tones of 8000, 4000, 2000 and 1000 cycles per second were measured in a typical discrimination box situation which had initially been very difficult to learn. At 8000 cycles the threshold was found to approach that of man, but became progressively higher as the frequency was lowered. The introduction of harmonic components in the tone apparently lowered the threshold appreciably at 1000 cycles. The differential intensity threshold at both 2000 and 4000 cycles, at a sensation level of 20 db., was high as compared with that of man. It was increased when the intensity was lowered to a 10 db. level. Consideration of these results, and the results of experiments on the rat, cat, and guinea pig by others, lends support to the hypothesis that the observed thresholds may be psychologically rather than physiologically determined, and are possibly specific to the discrimination situations in which they are measured. The evidence on this point, however, is not entirely conclusive. - C. W. Brown (California).

6245. Hoff, H., & Pötzl, O. Über die labyrintharen Beziehungen von Flugsensationen und Flugträumen. (Labyrinthine relationships to sensations and dreams of flying.) Mschr. Psychiat. Neurol., 1937, 97, 193-211.—The authors report two clinical cases with central and labyrinthine disturbances, in which there were waking sensations of levitation and dreams of flying and falling. Attempts to produce, in hypnosis and paraldehyde sleep, sensations and dreams of flying by means of vertical and rotatory nystagmus met with some success in three persons. The phylogenetic, biological, and psychoanalytical problems are discussed.—P. L. Krieger (Leipzig).

6246. Holm, S. Myopiproblemet. (The problem of myopia.) Svenska Läkartidn., 1938, 35, 1416-1427.—A general résumé of the literature, with special reference to the relative roles of environmental and hereditary factors.—M. L. Reymert (Mooseheart Laboratory for Child Research).

6247. Holway, A. H., & Hurvich, L. M. On the psychophysics of taste. I. Pressure and area as variants. J. exp. Psychol., 1938, 23, 191-198.—In this study the technique of the simple sensory reaction was used to determine the speed of the gustatory response to NaCl solutions. Concentration and temperature of the inciting solute were parameters; hydrostatic pressure and area of exposed sensory surface were variants. Data were secured for two areas and for five pressures from practiced subjects.

Results show that the speed of reaction is an increasing function (1) of the applied pressure and (2) of the area of the stimulated sensory surface. Following a consideration of the mechanics and kinetics of proximal stimulation the authors reject the notion that a single taste cell may be a sufficient condition for the arousal of the threshold. Instead, a theoretical interpretation of the obtained functions is formulated in terms consonant with neurophysiological fact. The minimum perceptible for taste is taken to depend upon the initiation of a constant number of nervous impulses per unit of time in the central nervous system.—H. W. Karn (Pittsburgh).

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6248. Hundertmark, A. Modellversuche über die Orientierung der Eiraupen der Nonne (Lymantria monache L.) und ihre ökologische Auswertbarkeit. (Model studies on the orientation of young nun-moth caterpillars and their ecological evaluation.) Z. Forst- u. Jagdw., 1938, 70, 225-270.-Laboratory studies were made on the reactions to light, gravity, form, and color of 2-3-day-old nunmoth caterpillars. Attraction to light was stronger than the urge to climb. They showed a well developed ability to distinguish forms, having a decided preference for objects tapering upward and avoiding those with inverted taper. They apparently had no perception of depth or volume, although they were attracted by objects occupying the widest visual angle when the shape was the same. Given rectangles or triangles with equal bases, the tallest were preferred; with equal heights, the broadest. Experiments with objects of various colors indicated that the caterpillars could distinguish colors: orange, yellow and green repelled them, blue and violet attracted them, and red seemed to appear as a gray, not as a color.—(Biol. Abstr. XII: 8009).

6249. Inui, T., & Kido, M. [On the process of color mixtures. II.] Jap. J. Psychol., 1938, 13, 45-54.—Seven kinds of experimentation are reported in this paper as the second study on the process of color mixture. The first experiment deals with a study carried out with a color mixer under varied time of exposure. Wundt's tachistoscope was used in all the others under varied speed of motion, varied order of presentation, doubled time of exposure with the same speed, varied distances between mixed colors, and varied proportions of brightness. It was concluded that though the three factors (i.e. the two colors present and the brightness to alter the intensity of stimuli) are necessary for color mixture, repetition is also a condition which unites them.—R. Kuroda (Keijo).

6250. Jaensch, P. A. Pupille. (The pupil.) Fortschr. Neurol. Psychiat., 1938, 10, 366-384.— This article is classified in the allied fields of ophthalmology and neurology. Because of the wealth of material, the author has gone back only as far as 1933, though the last similar publication was in 1930. The present survey is concerned with the anatomy of the pupillary arcs and centers, including contraction and dilation, the pupillary fibers of the

socket, the physiology of pupillary movements, the pharmacology of the pupil, and pathological movements. Disturbances of contraction and dilation, stimulus requirements, and unusual disturbances are also discussed briefly. Bibliography.—D. S. Oberlin (Delaware State Hospital).

mutation in rice. J. Hered., 1938, 29, 315-318.— An ageotropic recessive factor in rice is described.— G. C. Schwesinger (American Museum of Natural

History).

6252. Julien, P. F. J. A. De verdeeling van den phenylthio-ureum-smaakdrempel in Nederland en west equatoriaal Afrika. (The distribution of the taste threshold for phenyl-thio-urea in the Netherlands and in western equatorial Africa.) Mensch en Maatsch., 1938, 14, 364-365.—This is a preliminary report concerning taste reactions to the combination of phenyl with thio-urea. In the United States, most subjects reported an intensely bitter taste, to some it was tasteless, and to still others it had a wide variety of tastes. Both low and high thresholds were most commonly found in persons whose parents showed similar reactions to this chemical, but the fact that lack of sensitivity occurred in some persons in otherwise sensitive families might indicate that it is a recessive characteristic. Group differences appear to be racial but not sexual. Of 414 pygmy subjects and 711 negroes in western equatorial Africa, 97% and 98% respectively pronounced the combination bitter, while among 1438 non-Jewish subjects in the Netherlands the distribution was 83% bitter, 13% tasteless, 4% other taste, and among 239 Jewish subjects 74% bitter, 17% tasteless, 9% other taste. -H. Beaumont (Kentucky).

6253. Kerridge, P. M. T. Hearing and speech in deaf children. Spec. Rep. Ser. med. Res. Coun., Lond., 1937, No. 221. Pp. 137.—Of 456 children in London schools for the deaf 3% had no hearing in either ear, 6% had no hearing in one ear, and 10% had no hearing for the speech frequencies. Losses up to 50 db. caused little defect in speech, but 95% of the children with losses over 90 db. had poor speech. 48 children were taught speech with an amplifier for one year; 44% benefited considerably, 19% benefited some, 16.5% gained only an appreciation of rhythm in speech with some educational benefit, 8% gained this appreciation without educational benefit, and 12.5% received no benefit.—E. D.

Hunt (Brown).

6254. Klinckert, A. Formcharaktere im Farbwandelspiel. Eine experimental-deskriptiv psychologische Untersuchung. (Form characters in color change. An experimental and descriptive psychological study.) Bochum-Langendreer: Pöppinghaus, 1937. Pp. 115.—R. R. Willoughby (Brown).

6255. Koshtojanz, C. H., & Vassilenko, P. D. On the receptor function of the swim bladder of fishes. J. exp. Biol., 1937, 14, 16-19.—This paper reports experiments on the kymographically recorded responses of fins, gills, and heart of the fish

Cyprinus carpis L. to alterations of pressure upon the swim bladder. Rise of pressure was found to produce strong responses of all fins and a reaction of the respiratory organs (activation, then depression) and of the heart. The same effects could be produced by stimulating the branch of the n. vago-sympathicus leading to the bladder. After section of this branch of the nerve, change of pressure in the bladder is without effect on the fins and the respiratory and cardiac muscles. Two references.—C. K. Trueblood (Harvard).

6256. Ludvigh, E., & McCarthy, E. F. Absorption of visible light by the refractive media of the human eye. Arch. Ophthal., Chicago, 1938, 20, 37-51.—The transmission of visible light by four freshly enucleated human eyes was measured by means of a modified constant deviation spectrometer and two photocells. Measurements were made at every 10 millimicrons from wave-lengths 400 to 500, at every 20 from 500 to 700, and at every 40 from 700 to 820. Transmissions of the cornea, aqueous, lens, and vitreous were then separately determined. In the published data, transmission values are corrected to represent results for younger eyes (21.5 years), since the lenses in older eyes such as those used are much more absorptive. Results show a marked decrease in transmission from the red end of the spectrum (71.6%) to the short wave-lengths (8.6%) at 400).-M. R. Stoll (Mass. Eye & Ear Infirmary).

6257. Niessing, K. Das Verhalten der Deckzellen des Meerschweinchennetzes unter den Einfluss verschiedener Reizmittel. (The behavior of the Pacinian corpuscles in the mesentery of the guinea pig in response to various kinds of stimulation.) Z. Zellforsch., 1938, 28, 238-273.—P. L. Krieger (Leipzig).

6258. O'Day, K. The retina of the Australian mammal. Med. J. Aust., 1938, 25, 326-328.—(Biol. Abstr. XII: 8016).

6259. Ogasawara, Z. [A study on the constancy phenomena. I. On the constancy of phenomenal velocity.] Jap. J. Psychol., 1938, 13, 29-44.—In connection with J. F. Brown's study on phenomenal velocity the author investigated special characters of the constancy of velocity along with its general ones. Two apparatuses, one of which is a modification of the other, consist principally of two strawboard boxes each pulled by a string attached to it with a motor, and two tables along the surface of which each box was moved. The distance between the subject and the standard object was 2, 3, 4 or 5 meters, and the velocity of the object was 56 or 36 cm. per second; the distance between the subject and the comparable object was 1 or 4 meters, and its velocity was of seven kinds from 45 to 75 cm., or seventeen kinds from 26 to 60 cm. per second, the whole length of motion being 62 or 75 cm. First the standard motion and then the comparable one were observed and the velocities were compared successively. The author found that the phenomenal velocity shows a constancy of over 0.86 under normal conditions, and this index number remains even

when the object is removed to a few meters. This constancy is rather higher than that of size recognized in the same visual field. Some changes in the visual field cause lowering of the constancy, but it is increased by the synthetic attitude of observation. Simultaneous change of movable range in both objects has no effect upon the constancy, and the phenomenal velocity increases or decreases in accordance with that of size in objects.—R. Kuroda (Keijo).

6260. Ogasawara, Z. [Further experiments on phenomenal pathway of the apparent movement.] Jap. J. Psychol., 1938, 13, 73-86.—4, 8, 12, 16, 20 or 24 small lights distributed in several ways were used as stimuli. The pathway was observed clearly curved only when the light stimuli were seen after making a single point as a unit, but when a group of stimuli was grasped as a certain figure with some extension and the firmer its Gestalt was, the oftener the form itself became a unit of the motion, the pathway more obscure, and the curve rarer or even not to be seen at all.—R. Kuroda (Keijo).

6261. Rayleigh, Lord. Vision in nature and vision aided by science; science and warfare. Science, 1938, 88, 175–181; 204–208.—The first section of this lecture is devoted to a discussion of vision and its artificial aids and substitutes. Here are discussed the eye, lenses, microscopy, cathode-ray microscopy, spectrometry, photography, photo-electric phenomena, and television, showing how they aid or supplement the eye in research.—F. A. Mote. Jr. (Brown).

6262. Riggs, L. A. Dark adaptation in the frog eye as determined by the electrical response of the retina. J. cell. comp. Physiol., 1937, 9, 491-510.-By means of a direct-coupled amplifier and string galvanometer the retinal action potentials were recorded in response to flashes of light of varying intensities. The wave form changes as adaptation proceeds; the height and slope of the b-wave increase progressively, but not proportionally. The responses are analyzed and compared with those of the human eye. The shape of the dark adaptation curve is dependent on the intensity and the duration of the pre-adapting light. Brief pre-adaptation to high intensity is followed by rapid dark adaptation, while a more prolonged pre-adaption to moderate intensity leads to gradual adaptation. The findings are consistent with Wald's visual cycle hypothesis. -O. W. Richards (Spencer Lens Company).

6263. Rönne, H. Die Architektur des corticalen Sehzentrums durch Selbstbeobachtung bei Flimmerscotom beleuchtet. (The architecture of the cortical visual center considered through self-observation of flicker scotoma.) Acta ophthal., Kbh., 1936, 14, 341.—The brain surface offers no basis for assuming a connected retinal image, since there is neither "above" nor "below." The hypothesis is therefore natural that in the projection of a flicker scotoma on the visual field a certain irregularity arises at the moment when it reaches the boundary between the upper and lower quadrants of the field.—P. L. Krieger (Leipzig).

6264. Ruch, T. C., Fulton, J. F., & German, W. J. Sensory discrimination in the monkey, chimpanzee and man after lesions of the parietal lobe. Arch. Neurol. Psychiat., Chicago, 1938, 39, 919-937.—These authors conclude that parallel studies of the cortical localization for the discrimination of roughness and of lifted weights in these experimental animals show a progressive corticalization of sensory functions which is reflected in disturbances of sensory discrimination following lesions of the postcentral gyrus and the posterior parietal lobes. When tests are made several weeks after operation, these lesions in the monkey are without effect on weightdiscriminatory ability; in the chimpanzee the disturbances that occur disappear with retraining; in man marked blunting of weight-discriminatory ability is reduced by training to a small but definite permanent deficit. The degree of recovery of discriminatory ability possible after partial lesions of the parietal lobe is a striking feature of the observations on both chimpanzee and man. Retraining is an important factor in this recovery.-W. Marshall (Appleton Clinic, Wis.).

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6265. Scheideler, J. Untersuchungen der Vestibularisfunktion mit exakt dosierbarem kalorischen Reiz. (Examination of vestibular function with exactly graduated caloric stimuli.) Arch. Ohr., Nas.- u. Kehlkheilk., 1938, 144, 395-402.—Scheideler describes a method for caloric testing of vestibular function by which water at constant temperature and under constant pressure can be directed under visual control against a definite spot on the meatus or drum. The results show in general that with this method a relatively greater stimulating effect can be attained with small amounts of water than previously with large quantities, and further, that control of the temperature and of the duration of the stimulus is essential for an exact determination.—P. L. Krieger (Leipzig).

6266. Schmidt, J. Farbensinnuntersuchungen an normalen und anormalen Trichromaten im Unterdruck. (Investigations of color vision of normal and abnormal trichromats in decreased atmospheric Luftfahrtmedizin, 1937, 2, 55-71.pressure.) Schmidt confirms and extends Velhagen's findings in regard to hypoxemic color asthenopia. Color sensitivity either remains unchanged at high altitudes or slowly decreases above 4000 m. If no color asthenopia exists under normal pressure, color discrimination is not affected by decreased pressure. If, however, color asthenopia exists, it is usually increased by decreased pressure (above 3000 m. altitude). A pure hypoxemic color asthenopia was not observed. Hypoxemic discrimination is not an independent phenomenon but a stage dependent on altitude. Absolute sensitivity to colors is less involved than relative sensitivity. In normal trichromats absolute sensitivity to green is slightly decreased at high altitudes. Characteristic differences between normal and abnormal trichromats and dichromats remain even in reduced atmospheric pressure.—P. L. Krieger (Leipzig).

6267. Smith, W. A uniform procedure in orthoptics. Amer. J. Optom., 1938, 15, 281-289.-Only slight variations in the fundamental program are necessary in training different types of muscle imbalance. The steps required in typical cases of esotropia or esophoria are: (1) establish visual orientation; (2) create sensitivity in affected retina; (3) teach macular fixation; (4) teach projection; (5) correct amblyopia for near and distance; (6) establish monocular and binocular perception; (7) tend to develop diplopia; (8) start co-ordination training; (9) fusion training (with base-in prism); (10) duction training: (11) stereopsis training. Exophorias and exotropias are similarly treated, except that base-out prisms are used and accommodation training is frequently necessary. With vertical deviations, vertical exercises must be added as early as feasible. In cases of alternating squint, amblyopia does not occur, but emphasis must be on eliminating the tendency to suppression and on developing diplopia. -M. R. Stoll (Mass. Eye & Ear Infirmary).

6268. Spadavecchia, V. L'apprezzamento visivo spaziale, sintesi delle nozioni visive del volume e della posizione degli oggetti. (Visual appreciation of space; synthesis of the visual ideas of volume and position of objects.) Atti Congr. Soc. Oftal. ital., 1937, 1-8.—L. Canestrelli (Rome).

6269. Umezu, H. [On length.] Jap. J. Psychol. 1938, 13, 1-28.—An inquiry started from tactual and kinesthetic experience of length was extended to successive comparison of motion traces of a light stimulus in a dark room. It is already known that there is some uncertainty in the estimation of length even when the speed of motion, its direction, etc., are kept constant, as well as when these conditions are allowed to vary. Though variability was found, solid lines of different lengths in a light room and light lines in a dark room were accurately estimated successively. The lengths made by two light points simultaneously presented were first compared with each other, which was done with ease; but those successively done were difficult. The author concluded that in spite of various ways of length presentation the difficulty of comparison depends upon whether the lengths to be compared are given wholly or partially; and that easy judgments are made intuitively, but in difficult ones spatial, temporal and transpositional relations are used as cues. The author points out four factors underlying our experience of length. The nature of the comparison process in length in general was also taken into consideration.—R. Kuroda (Keijo).

6270. Verne, J. Pigments et lumière. (Pigments and light.) Radiologica, 1938, 2, 185-199.—
"Pigmentation is, among living beings, strictly conditioned by light. Light seems to act altogether on pigment genesis chemically, and on the state of the pigment cell directly or chiefly by neuro-humoral paths (eye, hypophysis, sympathetic nerves)."—
P. L. Krieger (Leipzig).

6271. Wald, G. On rhodopsin in solution. J. gen. Physiol., 1938, 21, 795-832.—Properties of marine

fish, frog and mammalian rhodopsin in solution are studied. The spectrum of rhodopsin corresponds rather well in form and position with the spectral sensitivity of human rod vision. The significance of rhodopsin in the retinal cycle is discussed.—M. A. Rubin (Worcester State Hospital).

6272. Werner, S. Die Bedeutung der Pupillen-grösse für die Fusionsfrequenz bei Untersuchung mit intermittierendem Licht. (The importance of the size of the pupil for fusion frequency in examination with intermittent light.) Acta Ophthal., Kbh., 1936, 14, 28-38.—The eye adapted to light, but with an artificially contracted pupil, has a lower fusion frequency, and one with a pupil artificially dilated a higher fusion frequency, than an eye with a normal pupil. The lower frequency is at least partly due to a weaker adaptation to light, the higher frequency to a stronger adaptation. After 45 minutes of adjustment to the dark, when the eyes (independently of the size of the pupils) are adapted to about the same degree, the difference in fusion frequency disappears to a large extent, but not entirely. The remaining difference is due to the fact that in pupils of various sizes unequal amounts of light are thrown into the eyes by the single flashes of the flicker test.—P. L. Krieger (Leipzig).

6273. West, L. S. Coincident inheritance of strabismus and nystagmus as a sex-linked recessive. Eugen. News, 1938, 23, 69-70.—Apparent "progressive heredity" is reported in three generations of a family. In the first generation the father suffered from pronounced nystagmus. Five of his sons manifested inherited visual defect of serious character. Two sons and five daughters were normal. Four of five affected grandsons show strabismus as well as nystagmus; the worst of these shows also amblyopia. Whether a single genetic factor with multiple genotypic effects is here involved is unknown at present. "Progressive heredity" has been thought to rest upon dominant genes, but at least one sex-linked recessive gene is here involved.—M. V. Louden (Pittsburgh).

6274. Wykes, U. Photic control of pigmentary responses in teleost fishes. J. exp. Biol., 1937, 14, 79-87.—This paper reports results of experiments in the photic stimulation of several species of shallowwater teleosts (Gobius paganellus, G. ruthensparri, Ctenolabrus rupestris, Lepadogaster gouani, Phoxinus phoxinus) all of which, when blinded, were found still to show a pigmentary response to photostimulation. In Lepadogaster gouani the melanophores of the blinded animal contract in darkness and expand when illuminated by a 100-watt lamp. In the normal fish the latter response is checked by a secondary contraction. Dermal responses of these fishes are found closely comparable to that of the chameleon, and may, it is supposed, be similarly controlled. No response was observed in adult Pleuranectes platessa. 15 references.—C. K. Trueblood (Harvard).

[See also abstracts 6171, 6172, 6175, 6176, 6177, 6178, 6181, 6203, 6214, 6219, 6226, 6276, 6279, 6325, 6326, 6340, 6352, 6353, 6429, 6453, 6456, 6514, 6580, 6585, 6622, 6683.]

LEARNING, CONDITIONING, INTELLIGENCE

(incl. Attention, Thought)

6275. Brown, C. W., & Ghiselli, E. E. Subcortical mechanisms in learning. II. The maze. J. comp. Psychol., 1938, 26, 27-44.—45 rats with lesions in various parts of the subcortex and 23 control animals were run on an 18-unit multiple-T maze. Performance was measured in terms of both trials and errors. As a group the operated animals were retarded. The amount of retardation varied somewhat with the particular region destroyed. Lesions in the pretectal region caused the least deterioration, those in structures anterior to the thalamus a greater retardation, and lesions in the thalamus the greatest. No subcortical structure was found to be essential to maze performance. Several hypotheses are suggested to explain the retardation of the operated animals.—C. W. Brown (California).

6276. Brown, C. W., & Ghiselli, E. E. Subcortical mechanisms in learning. IV. Olfactory discrimination. J. comp. Psychol., 1938, 26, 109-120.-40 rats with subcortical lesions and 22 control animals were trained to discriminate the odors of anise and creosote. The operated rats showed no loss of learning ability or retardation in learning. The evidence indicated that no single central nervous structure is essential for the habit, and that mass action, either in the cortex or subcortex, does not operate in the habit. The most likely explanation of the nervous mechanisms underlying the habit is that there are two or more equivalent subcortical complexes capable of mediating the habit, and upon the disturbance or destruction of one of them the function is carried out by another. At the present time it is impossible to delimit the particular subcortical complexes which may be involved.—C. W. Brown (California).

6277. Bugelski, R. Extinction with and without sub-goal reinforcement. J. comp. Psychol., 1938, 26, 121-134.—Rats were trained to press a bar to obtain food, a distinct click accompanying the operation of the bar. When the habit was extinguished the rats in whom the habit was extinguished without the click responded a fewer number of times than rats extinguished with the click. A second extinction with experimental changes in the groups of animals gave the same general result. concluded that the click during extinction functioned as a partial or sub-goal and that its absence during extinction increased the frustration resulting from the removal of the food reward. The study offers experimental demonstration of the sub-goal principle used to explain certain features of serial learning.-C. W. Brown (California).

6278. Fischel, W. Vergleichende Untersuchung des Verhaltens der Wirbeltiere. (Comparative study of the behavior of vertebrates.) Ergebn. Biol., 1935, 11, 219-243.—Advance in psychic development of vertebrates is concerned with retention

of excitabilities and perceptions, learning of movements, and post- and preconditioned adaptations. Postconditioned behavior is an activity which is expected to have the same success as in the past. Preconditioned activity is the adaptation of behavior to attain an end as yet unexperienced. Fishes stand lowest in the scale, followed in order by reptiles, carnivora, herbivora, and apes.—P. L. Krieger (Leipzig).

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6279. Ghiselli, E. E., & Brown, C. W. Subcortical mechanisms in learning. III. Brightness discrimination. J. comp. Psychol., 1938, 26, 93-107.—The performance of a group of rats with subcortical lesions was compared with that of a group of control animals on a brightness discrimination problem. It was found that lesions in structures anterior to the thalamus had little or no effect upon the rate of learning, while destruction in the thalamus, pretectal area, and optic nerves produced retardation. No single structure was found to be essential for the formation of the habit. Various theories of cerebral function were considered, and that of vicarious functioning was shown to fit the experimental findings best.—C. W. Brown (California).

6280. Gilhousen, H. C. Temporal relations in anticipatory reactions of the white rat in a maze. J. comp. Psychol., 1938, 26, 163-175.—Rats confined in the middle of a maze run slowly to the confinement box on subsequent runs. If an animal encounters an open confinement chamber, its next run is made at a basic speed, the basic speed being as fast a run as possible. Evidence indicates that the retention of this single event and the release will be complete after a 6-minute interval. A run at a basic rate is made only in the situation where release has been encountered. A release in one maze does not transfer to another maze which has also been blocked. The anticipatory factor involved, therefore, is probably not to be thought of as a simple release from tension, but as one of a more cognitive nature related to a specific environment and a specific maze.—C. W. Brown (California).

6281. Heugel, D. Autogenes Training als Erlebnis. Protokoll einer psychologischer Entwicklung. (Autogenic training as experience. Protocol of a psychological development.) Leipzig: Hirzel, 1938. Pp. 70. RM 4.80.—R. R. Willoughby (Brown).

6282. Hilgard, E. R., & Humphreys, L. G. The retention of conditioned discrimination in man. J. gen. Psychol., 1938, 19, 111-125.—31 subjects who participated in earlier conditioned eyelid discrimination experiments were retested after periods of 4 to 19 months. Verbally, only 7 remembered the relation of the reinforcing agent (a puff of air to the cornea) to the positive stimulus (an illumination increase), and only 4 reported the fact that they had given conditioned responses more frequently to the positive than to the negative stimulus. In their motor discrimination, however, 29 subjects showed an excess of responses favoring the positive stimulus within retention. Responses to both positive and

negative stimuli recovered from the extinction which had followed original conditioning to a value in the first few trials of the retest equalling the performances in the final conditioning trials. No differences are reported corresponding to the length of retention interval. Possible reasons for the temporary nature of extinction and the more enduring nature of discrimination are discussed.—E. D. Hunt (Brown).

6283. Honzik, C. H., & Tolman, E. C. The action of punishment in accelerating learning. J. comp. Psychol., 1938, 26, 187-200 .- In a black-white discrimination problem a group of rats that was required to jump an 81/2-inch gap placed 4 inches in front of the doors learned significantly more rapidly than a group without a gap. Jumping a gap placed behind the doors, that is, after an overt response had been made to the doors, had no effect on the rate of learning. A group required to jump a gap placed 15 inches in front of the doors was greatly retarded in comparison with a group that jumped a gap 4 inches from the doors, but not retarded in comparison with a group that had no jump. The accelerative effect of the jump is believed to be due to the pause it necessitates, which gives opportunity for longer stimulation and tends to prevent headlong responses, and to the state of enhanced responsiveness to stimuli that results from the obstruction, annoyance, and fear of the gap and jump.—C. W. Brown (California).

6284. Hovland, C. I. Experimental studies in rote-learning theory. III. Distribution of practice with varying speeds of syllable presentation. J. exp. Psychol., 1938, 23, 172-190.—In this study 32 S's learned lists of 12 nonsense syllables by the anticipation method, with massed and distributed practice, at a 2-second and a 4-second rate of presentation. During distributed practice a 2-minute period of color-naming was interpolated between trials. Major findings are as follows: (1) Fewer trials were required for learning by massed practice with the 4-second than with the 2-second rate. (2) Distribution of practice was effective in reducing the mean number of trials for learning at the 2-second rate. 72% of the S's learned more rapidly by distributed than by massed practice. (3) The advantage of the distributed practice over the massed was most apparent in the central portion of the serial lists. (4) Distribution of practice was less effective with the 4-second rate than with the 2-second rate, although distributed practice was still superior to massed. (5) Negative acceleration in learning by massed practice was marked at the 2-second rate, but was reduced when the learning was at the 4-second rate. Increasing the time either between successive trials or between successive syllables decreased the rate of negative acceleration. The theoretical implications of the results are discussed and the most common theories of distributed practice are reviewed and criticized.-H. W. Karn (Pittsburgh).

6285. Jones, F. N., & Taylor, F. E. The relative effects of goal orientation and direction of the last

turn on maze learning in the rat. J. comp. Psychol., 1938, 26, 19-26.-Four groups of rats were used in a problem so designed that for two groups goal orientation and last turn work to reinforce each other, while for the other two groups they work in opposition to each other. 43 animals were used on a modification of the maze of Spence and Shipley. It is concluded that under the conditions of this experiment the position of the goal in space has no measurable effect upon the maze behavior of the rats. Three possible explanations offered are: (1) the rats ran solely in terms of the last turn direction, (2) they ran in terms of an abstracted spatial pattern of the maze, and (3) the long last alley served as a sub-goal toward which the animals were oriented.-F. A. Mote, Jr. (Brown).

6286. Karn, H. W. The behavior of cats on the double alternation problem in the temporal maze. J. comp. Psychol., 1938, 26, 201-208.—Two cats were trained to master a temporal maze with the sequence RRLL. Both attained a final accuracy of 90%. Following this the performance of one animal gradually became worse and behavioral symptoms characteristic of experimental neurosis were manifested. The other animal failed the problem when the sequence of turns was lengthened to RRLLRRLL. Hunter's hypothesis of a symbolic process was used to interpret the results.—C. W. Brown (California).

6287. Kellogg, W. N., & Walker, E. L. "Ambiguous conditioning," a phenomenon of bilateral transfer. J. comp. Psychol., 1938, 26, 63-78.—6 dogs were conditioned to withdraw the right forepaw by means of the buzz-shock method. The response was extinguished and then reconditioned. Following this the shock was transferred to the left forepaw and records taken of the movement of both forefeet during the conditioning of the left forepaw. The original conditioning of the right foot required the largest number of stimulations, the conditioning of the left foot the next highest, and the reconditioning of the right foot the lowest number. Three animals failed to extinguish the right foot response completely during the conditioning of the left foot, and actually made more withdrawals of the right foot during this time. The term "ambiguous conditioning" is given to this phenomenon of lifting both feet to the conditioning stimulus. The authors believe ambiguous conditioning is a case of slow or delayed transfer which would disappear with prolonged stimulation.—C. W. Brown (California).

6288. Lehtovaara, A. Psychologische Zwillingsuntersuchungen. (Psychological twin studies.) Helsinki: Academiae Scientiarum Fennicae, 1938. Pp. 460.—The author studied 144 twin pairs and 2 sets of same-sex triplets in Finland. Ages ranged from 3 months to 17 years. In intelligence tests, school reports, and eidetic imagery, school-age identical twins resembled one another more than did fraternals. Twins of 3 months to 6 years showed progressively greater differences on the Bühler and Hetzer scale from identicals to same-sex fraternals to opposite-

sex fraternals. Girls tended to be in advance of boys. Responses to an oral questionnaire showed identicals, especially girls, to have strikingly higher "quotients of attachment," spend more time together, and share the same friends, interests, and vocational plans to a greater degree. "Mimical expressions," recorded by a concealed motion picture camera while twin pairs were observing a series of pictures, were decidedly more similar in identicals-not only qualitatively, but in speed of reaction, intensity, and profile" of the mimical curve. Intra-twin contacts during this experiment were not more frequent among identicals than among fraternals, though "partial contact relations" were, suggesting a kind of "polarization" of identical pairs. The book includes a summary of literature, English abstract, bibliography, and photographs.-B. S. Burks (Carnegie Institution).

6289. Marrow, A. J. Goal tensions and recall: I. J. gen. Psychol., 1938, 19, 3-35.—20 pencil-andpaper tasks were given informally to a varying number of subjects, all of whom were students of elementary psychology. The tasks were interrupted when the subject was about three-fourths finished, and the next task proffered. After the 20th task the subject was asked to recall as many of the tasks done as possible. Uncompleted tasks were recalled 57% better than completed tasks. The relation of RU (remembered uncompleted) to RC (remembered completed) was independent of the particular serial arrangement of the tasks. RU was less subject to the influence of retroactive inhibition than RC; there was some tendency for RU/RC to be smaller for those serial positions possessing superior memory value. An important factor in determining the size of RU/RC appeared to be the nature of the task with respect to the extent to which it admitted of a subjective incompleteness or completeness which might not correlate with external completion or incompletion.-E. D. Hunt (Brown).

6290. Marrow, A. J. Goal tensions and recall: II. J. gen. Psychol., 1938, 19, 37-64.—A second experiment similar to the author's Experiment 1 (see preceding) except for a change in the final instructions which led the subject to interpret objective completion as non-fulfillment of intention and objective incompletion as fulfillment of intention, showed that the superiority in recall of uncompleted tasks is a function of the fulfillment or non-fulfillment of the subject's intention with respect to a given task. The superiority of 57% exhibited in Experiment 1 was increased to 93% under conditions of specific encouragement in Experiment 3A, and to 71% for the discouragement conditions in Experiment 3B.—E. D. Hunt (Brown).

6291. Muenzinger, K. F., Bernstone, A. H., & Richards, L. Motivation in learning. VIII. Equivalent amounts of electric shock for right and wrong responses in a visual discrimination habit. J. comp. Psychol., 1938, 26, 177-185.—A black-white discrimination was used in studying the mechanism under-

lying the facilitating effect of shock. Further evidence was obtained that shock on the right response facilitated learning, but the facilitation was less than when the shock was administered on the wrong response. The amount of shock given on the right response was not an important factor. Evidence is presented to show that the facilitative effect of shock may be due to both a general and specific mechanisms. A general mechanism is inferred from the fact that the amount of vicarious trial and error increased in the initial phase of learning in both shock groups but remained relatively unchanged during learning in the no-shock group. mechanisms are deduced from the fact that the shockright group persisted in going to the end of the wrong alley, while the shock-wrong group quickly learned to turn back as soon as they entered the wrong alley .- C. W. Brown (California).

6292. Wellman, B. L. Our changing concept of intelligence. J. consult. Psychol., 1938, 2, 97-107.-A survey of case studies indicates that children who have had a cumulative stimulating elementary school environment are able to improve their IQ rating considerably; conversely, IQ's have decreased under unfavorable environmental conditions. Factors governing distance concern the organism, the environment, and specific conditions imposed by the experimenter. These include initial IQ, structural and psychological limitations, educational practices and procedures, group mental level, and the selection of children and environment. Factors governing time are the life span of the individual and experimental limitations. Rate of change is affected by the amenability of the individual and the suitability of the environment at the particular stage of development. "It is clear from the illustrations that children can and do change in test IQ from average to genius and from average to feeble-mindedness.' gence must be interpreted functionally. As a race we may be intellectually undernourished .- P. S. de Q. Cabot (Simmons).

6293. Wyman, W. I. The classification of inventive ideas. Sci. Mon., N. Y., 1938, 47, 211-219.

-O. P. Lester (Buffalo).

6294. Youtz, R. E. P. The change with time of a Thorndikian response in the rat. J. exp. Psychol., 1938, 23, 128-140.—39 male rats were trained to depress a horizontal bar to obtain a food pellet. One group of 20 rats received 10 reinforcements, the other 19 received 40. Half of each group were extinguished (by non-reward) 1 day after training and the other half 15 days afterward. With both the 10- and 40-reinforcement animals, those undergoing extinction 15 days after training made more responses than those extinguished 1 day afterward. The increased resistance to extinction, which is similar to that found in the conditioned response, is described in terms of loss of habituation.—R. E. P. Youtz (Barnard).

[See also abstracts 6308, 6393, 6415, 6442, 6460, 6507, 6622, 6692.]

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MOTOR AND GLANDULAR RESPONSES (incl. Emotion, Sleep)

6295. Adler, P. Periphere oder zentrale Auslösung der Muskelkrämpfe bei der sog. "Wechselstromnarkose" von Wassertieren. (Peripheral or central release of muscle spasms under alternating current narcosis in amphibia.) Z. Biol., 1938, 99, 17-26.—Use of curare in Rana esculenta increases the threshold current dose producing extensor spasms about sixfold; small, apparently ineffective doses of narcotics and hypnotics increase the threshold current dose of alternating current; small doses of centrally exciting substances decrease it. Alternating current works like centrally exciting substances, and contrary to centrally inhibiting substances. The release of general muscle spasms leading to immobility must follow centrally on irradiation by alternating current. Since Hoyos produced only an increase of excitability of the central nervous system in frogs through irradiation of the brain with alternating current, it may be assumed that alternating current cannot produce a primarily inhibiting effect (narcosis), either through irradiation of the animal under water or in air, with exclusive conduction of the current to the central nervous system. The findings of Hertz in man confirm this .- P. L. Krieger (Leipzig).

6296. Agduhr, E. Further observations on the increased resistance in mated animals to toxic agents. Skand. Arch. Physiol., 1938, 78, 259-267.—
"When compared with the body weights at the start of the experiment, the resistance to alcohol seems to be greatest during the period of the most rapid growth. Also the increase of the growth factors during a pregnancy seems to increased their resistance; this increase was especially marked in females, but the increase in the resistance due to mating is statistically proven for both sexes."—P. L. Krieger (Leipzig).

6297. Asmussen, E., & Hansen, E. Über den Einfluss statischer Muskelarbeit auf Atmung und Kreislauf. (The effect of static muscular work on respiration and circulation.) Skand. Arch. Physiol., 1938, 78, 282-303.—In static muscular work (bracing the legs against a slanting bar) it was found that ventilation, oxygen intake, and minute volume of the heart increase greatly after the work. Pulse and blood pressure, however, drop immediately after the work ceases. According to Linhardt these findings may be interpreted as the result of an inadequate blood supply during work. This is caused by the constricting effect of the contracted muscle fibers on the small blood vessels.—P. L. Krieger (Leipzig).

6298. Backman, P., Pirilä, V., Raekallio, T., & Väänänen, J. Die Schwankungen im Kreatinund Kreatingehalt des Blutes bei fortgesetztem starken Training. (Fluctuations of creatin and creatin content of the blood under protracted hard exercise.) Skand. Arch. Physiol., 1938, 78, 304-312.

—The experiments showed that the four subjects could be divided into two different types having distinguishable reactions.—P. L. Krieger (Leipzig).

6299. Basler, A., & others. Beiträge zur Physiologie der Körperhaare. (Contributions to the physiology of body hair.) Z. Biol., 1938, 99, 80-95. The authors present new methods for determining the firmness of rooting of body hairs, and hair movement. Firmness varies with bodily regions and is everywhere somewhat less for women and children than for men. The firmness of a young hair when another is still in the same follicle is on the average 15.4 g.; that of an older one, 31.8 g.; and that of an aged hair whose replacement is already present, 29.6 g. In women a maximum firmness of head and body hairs seems to occur shortly before menstruation, falling to a minimum in the course of a few days. Stoppage of blood, intense cold, and electrical stimulation decrease firmness; active hyperemia increases it. Studied by cinema, the reflex erection of hairs under cold stimulation (gooseflesh) resulted in a jagged curve. Accordingly there is tetany of the arrectores pilorum rather than simple twitching. -P. L. Krieger (Leipzig).

6300. Bell, G. H., & Knox, J. A. C. Recording of pulse rate during exercise. J. Physiol., 1938, 93, 36-37P.—By modification of the electrocardiograph amplifier it is possible to minimize the effect of skeletal muscle activity, thereby obtaining clearer records of pulse rate during movement of the subject.—M. A. Rubin (Worcester State Hospital).

6301. Bilancioni, G. L'orientazione negli animali come attitudine biologica. (Orientation in animals viewed as a biological attitude.) Atti Clin. oto-rinolaring. Univ. Roma, 1933, 31, 1-38.—L. Canestrelli (Rome).

6302. Briscoe, G. Changes in muscle contraction curves produced by drugs of the eserine and curarine groups. J. Physiol., 1938, 93, 194-205.—M. A. Rubin (Worcester State Hospital).

6303. Brosse, T. L'énergie consciente, facteur de régulation psycho-physiologique. (Conscious energy, a factor in psychophysiological regulation.) Evolut. psychiat., 1938, No. 1, 35-56.—Conscious autonomy, the most striking example of which is the control of their physical functions by the yogi, may be applied to the problem of functional pathology and the development of the individual in general, in that consciousness, through a modified education, may be thus prepared to assume mastery of its various faculties.—G. Goldman (Sorbonne).

6304. Büchner, F. Die pathogenetische Bedeutung der Hypoxämie. (The pathogenic importance of hypoxemia.) Klin. Wschr., 1937, Pt. II, 1409–1412.—P. L. Krieger (Leipzig).

6305. Cojazzi, L. Ricerche sperimentali sui riflessi vestibolo-vegetativi. (Pressione arteriosa e ritmo cardiaco.) (Experimental studies on the vestibulo-vegetative reflexes: arterial tension and cardiac rhythm.) Riv. oto-neuro-oftal., 1937, 14, 546-551.—The author studied the behavior of the

vestibulo-vegetative reflexes by the rotatory method of Nuys-Fischer, measuring at the same time the arterial tension by means of the Boulitte-Pachon apparatus. He will publish later the complete results; at this time he reports only the fact that heat stimulation of the head produces a diminution in the arterial tension.—L. Canestrelli (Rome).

6306. Cornell, C. C. Studies in eye, hand and foot preferences. Part 2. Eye, hand and foot preferences of psychotic patients compared with college students. J. juv. Res., 1938, 22, 115-119.—50 male and 50 female manic-depressive and 50 male and 50 female dementia praecox patients were compared with 200 college students. Four tests for hand preference, two for foot preference, and one for eye preference were used. 30% of the psychotics as compared with 13% of the normals exhibited crossed preference. No significant differences were found between the two psychotic groups or between the sexes. When two functions (hand and eye, hand and foot, eye and foot) were considered, no significant difference was found between the two psychotic groups. 10% of the normal males preferred the opposite hand and eye, and 20% of the normal females exhibited such preference. 76% of the psychotics exhibited a high degree of hand, eye and foot preferences. 85% of the normals fitted such a classification.—F. M. Teagarden (Pittsburgh).

6307. Dart, C. Studies in eye, hand and foot preferences. Part 3. Eye, hand and foot preferences of mentally subnormal subjects compared with individuals of normal or superior intelligence. J. juv. Res., 1938, 22, 119-122 .- 200 patients with intelligence quotients ranging from 34 through 71 were compared with 200 cases of normal or superior intelligence as to hand, eye and foot preferences. Four tests of handedness, two of footedness, and one of eyedness were used. Three-fourths of the control subjects showed a homolateral preference, while only two-thirds of the defective subjects showed the same "There is an indication that crossed preference. lateral preference, in general, may be related to mental subnormality." "There seems to be a "There seems to be a greater degree of cross preference with regard to the non-corresponding eye among the mentally subnormals than among the normal subjects." handedness was found to be only slightly or not at all more prevalent among the feeble-minded. difference between the two female groups was three times as large as the difference between the two male groups.-F. M. Teagarden (Pittsburgh).

6308. Davis, R. C. The relation of muscle action potentials to difficulty and frustration. J. exp. Psychol., 1938, 23, 141-158.—Muscle action potentials were recorded from forearm and neck locations in a group of 44 subjects while they were engaged in solving number series problems of varying degrees of difficulty. Increase in activity during work was found in nearly all cases. During rest the arm shows less activity than the neck location. During work there is a greater percentage of increase in the arm. No relation was found between increased activity

and success or failure in solution. With increasing difficulty of problem, as indicated by percentage of failures, there was an average increase in action potentials in both regions, for both failures and successes.—R. C. Davis (Indiana).

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6309. Dittler, R. Messende Versuche zur Theorie der elektrischen Reizung. 7. Mitt. Die Deutung der Erscheinungen bei indirekter Reizung des Muskels mit galvanischen Stromstössen verschiedener Dauer. (Quantitative investigations of electrical stimulation. 7: Interpretation of the effects of indirect stimulation of muscle with galvanic impulses of varying duration.) Z. Biol., 1938, 99. 38-46.—Under neurally conducted stimulation by induced galvanic impulses of definite intensity and stepwise increasing duration, frog muscle acts just as it does when directly excited. After attaining the peak of excitation, the action current pattern at first remains unchanged; thereafter several successive waves occur. The temporal position of these waves corresponds to that in the full rhythm curve and is independent of the duration of the exciting current. The sequence of excitations leads mechanically to superposition phenomena in the muscle. The twitches increase stepwise with the amount of excitation. This fact appears irreconcilable with the theory of the "method of summation" (Lippay, Berger) for the stage of the opening excitation.— P. L. Krieger (Leipzig).

6310. Elftman, H. The measurement of the external force in walking. Science, 1938, 88, 152-153.—An apparatus of suspended platform type, to be used to measure the force components in walking, is described. One figure.—F. A. Mote, Jr. (Brown).

6311. Eulenburg-Wiener, R. v. Fearfully and wonderfully made. New York: Macmillan, 1938. Pp. 472. \$3.50.—This book is a popular presentation of human anatomy and physiology. 2 chapters deal with the nervous system, particularly the basic properties of nervous tissue and the manner of functioning of the autonomic nervous system; 5 cover the muscles, the skin and the various senses.—M. H. Erickson (Eloise Hospital).

6312. Eyre, M. B. Studies in eye, hand, and foot preferences. Part I. Introduction. J. juv. Res., 1938, 22, 109-115.—A review of previous studies on laterality is given. Several unpublished studies are also reported. The need for working out criteria for testing footedness is mentioned. A part of the research was for the purpose of finding the correspondence between footedness, eyedness and handedness. Mention is made of the fact that eye, hand, and foot crossed laterality is found in a significantly greater degree in mentally subnormal, psychotic, and emotionally unstable adolescents than in normal individuals. Hand-foot correspondence is found to be greater than hand-eye correspondence, and hand-eye correspondence greater than eye-foot correspondence.—F. M. Teagarden (Pittsburgh).

6313. Eyre, M. B., Cornell, C. C., Dart, C., & Turner, E. Studies in eye, hand and foot prefer-

ences. Part 5. Bibliography. J. juv. Res., 1938, 22, 125-126.—22 titles.—F. M. Teagarden (Pittsburgh).

6314. Fage, L. L'industrie des araignées. (Industry in spiders.) Terre et Vie, 1938, No. 2, 35-43.

-G. Goldman (Sorbonne).

6315. Freeman, G. L. Our muscles and our minds. Sci. Mon., N. Y., 1938, 47, 161-167.— The muscles are important regulators and determiners of mental functioning. Experimental results suggest that the older notion of the brain controlling the rest of the body should be replaced by its conwatter, and this relativity is supported largely through the muscular processes. Mental processes suffer as the supporting postural substrate falls below or exceeds certain limits. Sleep results not so much from toxic substances in nerve cells as from the restriction of muscular activity.—O. P. Lester (Buffalo).

Vespa germanica und ihre Bedeutung für das Staatsganze. (The nest orientation of wasps and its significance for the community.) Z. Tierpsychol., 1938, 2, 75–98.—Wasps create a uniform structure by building according to a given pattern without regard for a unitary goal. Their nests are round because of their instinctive tendency to fill in recesses. Double nests, consisting of two independent nests joined together, are later given a single structure. Real social instincts are lacking, and every wasp works independently for itself. However, certain situations affect all individuals in the same manner and their orientation instinct forces them to return to the same nest, which in turn stimulates in all the same instinctive drive to identical building activities.—P. L. Krieger (Leipzig).

6317. Fukutomi, I. [On Loeb's phenomenon in the voluntary movement. I. Its critical inquiry and the object of the study.] Jap. J. Psychol., 1938, 13, 103-132.-The author first outlines J. Loeb's three studies on voluntary movement, and then minutely criticizes his method of investigation as well as the explanation of the phenomenon, proceeding finally to regard his standpoint as improper by citing several related studies such as those of Wundt, James, Jaensch, Kramer and Moskiewicz, Woodworth, Hollingworth, the author, etc. He points out three principal defects in Loeb's study: simultaneous contrast alone was taken into consideration, standard and test movements were executed under different conditions, and the experimental conditions adopted were generally too narrow and special. The present study was carried out in order to determine whether the phenomenon will take place in successive contrast of movements by the same limbs: 21 adult subjects were used in an apparatus modified from G. S. Hall and H. H. Donaldson, with a modified tracing apparatus originated by T. L. Bolton. General experimental methods are described.—R. Kuroda (Keijo).

6318. Gaul, A. Untersuchungen über die Arbeitsleistung bei Atembehinderung. (Studies on the capacity for work under restricted respiration.) Munich: Bayer. Druckerei & Verl. Anst., 1937. Pp. 16.—R. R. Willoughby (Brown).

6319. Gwynn, -, & Yater, -. Benzedrine sulfate as a mental stimulant. Med. Ann. D. C., 1937, 6, 356 ff.-10 mg. of benzedrine sulfate (benzylmethyl carbinamine sulfate, S. K. F.) was administered twice daily for three successive days to an experimental group of normal medical students, while a similar control group received lactose. Five days later the procedure was repeated with the grouping reversed. All of the 147 students employed reported some effects from the drug, 113 reporting temporary increase in energy, 72 reporting temporary exhilaration, 61 reporting increased power of mental concentration, and 8 reporting decreased power of concentration. Only 16 of the entire group reported effects of the placebo. Unpleasant but not serious reactions variously reported included insomnia, decreased appetite, rise in blood pressure, headache, and nervousness. The authors conclude that the drug may prove of value in restoring self-confidence, combating mild depressions, and causing increase of mental and physical alertness, but they recommend restricting its use to small doses as an emergency measure.-M. H. Erickson (Eloise Hospital).

6320. Hediger, H. Tierpsychologie und Haustierforschung. (Animal psychology and the study of domestic animals.) Z. Tierpsychol., 1938, 2, 29-46.—"Tame" and "domesticated" are different concepts. Tameness is acquired by individual wild animals, while domesticity applies to a species or a series of generations. The most essential characteristic of domesticity consists of the absence of tendency to flee from human beings. The domestication of mammals was preceded by their taming, which can be achieved only in captivity and consists of conquering the barriers separating them from man. Some species seem to possess a certain pre-adaptation for this rapprochement.—P. L. Krieger (Leipzig).

6321. Holzapfel, M. Über Bewegungsstereotypien bei gehaltenen Säugern. (Stereotyped movements of captive mammals.) Z. Tierpsychol., 1938, 2, 46-72.—In canines, stereotyped forms of behavior include rotating, moving in circles, running back and forth, and describing figures 8. They are caused and exaggerated by such affective factors as the tendency to flee, feeding, and social drives. Two foxes pro-vided material to determine the contradictory tendencies involved, as did a jackal which wanted to run away and yet was curious to see his visitors, with the result that he ran around in a circle. Of the thirteen horses observed, the highly nervous ones showed a special predisposition to "weaving, but so also did animals not otherwise occupied. It coincided with bowel and bladder movements, excitement of neighboring horses, etc., while in unorganized form it seems to be caused by digestive

upsets and sexual excitement in stallions. In any case, it expresses excitement. Statistics are given concerning its variability in connection with the operation of causal factors and the duration and frequency of the intervening pauses.—P. L. Krieger (Leipzig).

6322. Holzlöhner, E. Die Drüsentätigkeit bei Nervenreizung. Versuche an den Speicheldrüsen von Octopoden. (Glandular activity through nerve stimulation. Experiments on the salivary glands of octopods.) Z. Biol., 1938, 98, 479-496.—The cells of the resting gland are crowded with formed "giant granules" of uniform size. When the nerve is stimulated, the granules suddenly break down into clumps of detritus. This process is hastened by contraction of the smooth muscle surrounding the alveoli. The latent period and the rapidity of the rise of the secretory curve are markedly dependent on the preceding stimuli. The hastening of the commencement of the curve is due to contraction.—P. L. Krieger (Leipzig).

6323. Jacobson, E. You can sleep well; the ABC's of restful sleep for the average person. New York: Whittlesey House (McGraw-Hill), 1938. Pp. xix + 269. \$2.00.—Instructions, written popularly in the second person, for applying the author's technique of relaxation to the therapy of insomnia. These are contained principally in Chapters 8-13, which are illustrated by photographs of a relaxing subject; Chapters 1-7 describe the course of the insomniac's difficulties, and Chapters 14-19 concern children's sleep, dreams, and an account, in the same genre, of the author's research procedures and findings.—R. R. Willoughby (Brown).

6324. Jakway, I. Voluntary activity in the rat as related to intake of whole yeast. J. comp. Psychol., 1938, 26, 157-162.—7 control rats and 8 experimental rats, all females, were fed a vitamin-free basal diet, supplemented by 9 drops of cod liver oil per day. Control animals received in addition 1.0 gram powdered whole yeast per day, and experimentals were fed about 0.2 gram of yeast per day, or enough to allow a weight gain of 10 grams per week per rat. The experiment was continued for 8 weeks. All rats were placed in individual activity cages, with automatic recording devices, and their activity was recorded once a day. Control rats were significantly more active than experimental rats.—C. W. Brown (California).

6325. Jalavisto, E., Kalin, A., & Parvela, L. Die Spannungsempfindung in ihrer Abhängigkeit von dem Verkürzungsgrad des Muskels. (The dependence of sensations of tension on the degree of muscle shortening.) Skand. Arch. Physiol., 1938, 79, 63-86.—The starting point of this study was Walter's phenomenon, viz., that the sensation of tension is weaker when a given weight is raised by means of a lever (Federvermittlung) than when it is lifted directly. The determining factor in both cases proved to be a difference in the length of the muscle, not adaptation. The authors' experiments, flexion and abduction of the index finger and raising

the arm in the frontal plane, prove that the tension developed by the shorter muscle is usually underestimated. This underestimation does not rest in distinguishing as such either the factor of muscle rotation or the position of the joint. The frequency of motor impulses registered shows no relation to the sensations of tension if the muscle length corresponding to the same tension varies. The problem of peripheral receptors of tension sensations is also discussed.—P. L. Krieger (Leipzig).

6326. Jalavisto, E., Linkkonen, L., Reenpää, Y., & Wilska, A. Spannungsempfindung, Muskelspannung und motorische Impulsfrequenz bei dem unbeanspruchten Muskel und beim Kohnstamm-Matthaeischen Phänomen. (Sensation of tension, muscle tension and frequency of motor impulse in the resting muscle and with the Kohnstamm-Matthaei phenomenon.) Skand. Arch. Physiol., 1938, 79, 39-62.—Frequency of motor impulses and increase in sensations of tension stand in arithmetical progression. The relationship can, however, be broken up. After considerable static demands on a muscle, a given rate of impulse corresponds to twice the muscular tension, and the correlation between tension and sensations of tension also disappears. On the other hand, the correlation between tension sensations and impulse frequency remains. Various considerations oppose the former idea of the equivalence of "sensations of tension" and "sensations of innervation," particularly the influence of the degree of muscle shortening on sensations of tension (which become not stronger but weaker), and the results of earlier experiments on electrical stimulation .- P. L. Krieger (Leipzig).

6327. Jukes, C. L. Selection of diet in chicks as influenced by vitamins and other factors. J. comp. Psychol., 1938, 26, 135-156.—The experiment adds further evidence against the widely accepted opinion that animals possess an instinctive ability to choose the proper food constituents when given a free choice diet. Vitamins G and A were studied with chicks, one group having been given an adequate diet and the other a diet deficient in vitamins. It was thought that the taste of the food might be a factor in the chicks' choice of what they ate. Supplementary experiments showed that the choice was the same when the sugar content was varied, even when the amount of sugar was as high as 20%. Marked preference was shown when the salt content was above 2%, the quinine content above .03%, or the citric acid above 2%. Tests were made to determine whether the taste factor (sugar content) was important in the chicks' choice of food in the vitamin-deficient experiments. The results were negative.— C. W. Brown (California).

6328. Kalmus, H. Über die Umstimmung geotaktischer und ähnlicher Reaktionen durch Erlebnisse, besonders Situationserlebnisse. (The modification of geotactic and similar reactions through experiences, especially of an environmental nature.) Z. Tierpsychol., 1938, 2, 72-75.—The direction of the geotaxis of Dixippus larvae is a function of the

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P. L. Krieger (Leipzig).

6329. Krencker, H. Messende Versuche zur Theorie der elektrischen Reizung. 6. Mitt. Der Reizwert schwankungsfrei verlaufender galvanischer Stromstücke verschiedener Spannung. (Quantitative investigations of electrical stimulation. 6: The stimulus value of constant galvanic impulses of varying tension.) Z. Biol., 1938, 99, 27-37.-Extending the findings of R. Dittler and H. K. Müller that with definite intensities of current a definite increase in duration of excitation is required for each of the rhythmic action current waves, the extent of this increase was determined for currents of varying intensity. Currents of high tension require less increase than those of low tension. In regard to the temporal position, the period of excitation of the muscle becomes shorter as the tension of the current increases. Thus there is no absolute constancy of muscle rhythm .- P. L. Krieger (Leipzig).

6330. Lawton, G. The study of senescence: psychiatric and sociological aspects. Amer. J. Sociol., 1938, 44, 280–281.—The author points out that the study of senescence comprises two aspects; first, an investigation of the mental abilities of old people, and second, a study of their emotional lives. Three heads under which the psychological difficulties of aged people fall are pointed out, as well as a six-point program of the steps necessary to be taken in attacking the problems. The article is a summary of a paper given before the section on care of the aged of the Welfare Council, New York City, the full text of which is deposited with the Documentation Division of Science Service, Washington, D. C.—(Courtesy Amer. J. Sociol.).

6331. Lorenz, K., & Tinbergen, N. Taxis und Instinkthandlung in der Eirollbewegung der Grau-(Directed and instinctive behavior in the egg rolling movements of the gray goose.) Z. Tierpsychol., 1938, 2, 1-29.—Instinctive and directed behavior forms occur simultaneously and successively in the series of movements by which the gray goose replaces an egg which has rolled out of the nest. A directed stretching of the neck provides the stimulus for the instinctive activity, and at the same time constitutes the prerequisite posture for its performance, which is essential for the preservation of the species. By bending the neck and head toward the belly the goose pushes the egg, which reposes under her beak. This purely instinctive activity is guided and accompanied by a supplementary orientation reaction, consisting of keeping the egg in equilibrium and moving in the proper direction .- P. L. Krieger (Leipzig).

6332. Lurie, L. A. Pituitary disturbances in relation to personality. Proc. Ass. Res. nerv. ment. Dis., 1938, 17, 547-560.—The author discusses the effect of pituitary disturbances in children on the personality. Among other things he shows that children suffering from hypopituitarism of the Loraine-Levy type have an aggressive, dominant personality make-up. They are forward and aggressive and

tend to dominate their environment. In marked contrast, children suffering from hypopituitarism of the Fröhlich type and from the adolescent form of dystrophia adiposo-genitalis have a submissivecompliant personality make-up. They are charac-terized by a lack of aggressiveness, being gentle, timid and phlegmatic. Another characteristic is that they have a long reaction time. This slowness of response may even give the impression that they are mentally dull, whereas the opposite is most often the case. These direct effects of the pituitary deficiency on the child's personality may be heightened or completely changed as a result of the reaction of the child himself to his own deficiency in growth and structure. Instead of a submissive, passive, dependent child, there may emerge a highly aggressive, independent, dominant type of child. On the other hand, the passive, submissive personality characteristics may become intensified to the point where the child becomes hopelessly dependent. How a child will react to his own infirmities will depend largely on his constitutional endowment, his past experiences and his environmental situation; hence these indirect effects need not necessarily be the same in any two cases. The indirect effects may cause one child to withdraw from the world of reality, another to commit suicide, a third to become neurotic and a fourth to become delinquent. Thus the indirect effects on the personality may completely mask the true personality changes caused by the glandular deficiency.—L. A. Lurie (Cincinnati, O.).

6333. Mallis, A. Army ants in California. Sci. Mon., N. Y., 1938, 47, 220-226.—O. P. Lester (Buffalo).

6334. Marinesco, G., Jonesco-Sisesti, N., Sager, O. P., & Kreindler, A. Le tonus des muscles striés. (Tonus in striated muscle.) Bucuresti: Imprimerie Nationale, 1937.—R. R. Willoughby (Brown).

6335. Marmont, G., & Wiermsa, C. A. G. On the mechanism of inhibition and excitation of crayfish muscle. J. Physiol., 1938, 93, 173-193.—A scheme, based on experimental findings, for peripheral excitation and inhibition of crustacean muscle is described.—M. A. Rubin (Worcester State Hospital).

6336. Mattison, N. A new estimate of sleep quality. Med. Rec., N. Y., 1938, 148, 133-134.—General discussion is offered of the physical structure of man, of his posture, and of the need for taking these into consideration in the experimental investigation of the quality of sleep, particularly in relation to the problem of motility in sleep as correlated with various postures and types of beds and bedding.—M. H. Erickson (Eloise Hospital).

6337. Mertens, W. Tierversuche. I. Mitt. (Animal experiments. Pt. I.) Arch. Kreislaufforsch., 1938, 2, 192-209.—Using anesthetized dogs, Mertens studied with the rebreathing apparatus the effect of the pressor receptors and vagus regulation on anoxemia.—P. L. Krieger (Leipzig).

6338. Mittermaier, R. Der Nystagmus postrotatorius II als klinische Untersuchungsmethode. (Postrotatory II nystagmus as a method of clinical examination.) Arch. Ohr.-, Nas.- u. Kehlkheilk., 1938, 144, 403–416.—Observation of postrotatory II nystagmus permits, by means of the turning test, differentiation of a peripheral disturbance of equilibrium from a central lesion. It gives information on the condition of the central tracts, a central difference in tonus, and a tendency to nystagmus, and under certain circumstances it may bring out a previously latent spontaneous nystagmus. It also clarifies the diagnosis when the clinical findings have previously pointed only to a labyrinthine, i.e. peripheral injury.—P. L. Krieger (Leipzig).

6339. Pear, T. H. Das Wesen der Ungewandtheit und Unbeschicklichkeit. (The nature of clumsiness and awkwardness.) Industr. Psychotech., 1938, 15, 47-53.—A translation of a paper read at the Congress of Psychology, Paris, July 1937.—J.

C. G. Seidl (Manhattan College).

6340. Peretti, G. Variazioni toraco-pneumografiche in seguito a forti eccitamenti di alcuni organi di senso. (Thoraco-pneumographic variations following strong excitations in certain sense organs.) Fisiol. e Med., 1936, 7, 439-447.—Basing his conclusons on his research studies, the author shows that when strong stimuli arouse sudden excitations in certain sense organs, the respiratory apparatus always responds immediately with modifications in the pneumographic curve. These modifications are often very pronounced and have a given aspect and duration, according to the nature of the stimulus.—L. Canestrelli (Rome).

6341. Raynaud, A. Comportement sexuel des souris femelles intersexuées. (Sexual behavior of intersexual female mice.) C. R. Soc. Biol., Paris, 1938, 127, 993–995.—The sexual instinct in the female intersexual mouse is found to be greatly influenced by the genital hormones which circulate in the organism: the female hormones determine a behavior which is characteristic of the female mouse, while the male hormones bring about a pyschological masculinization.—G. Goldman (Sorbonne).

6342. Riesser, O. Zur Methodik vergleichender Bestimmung zentraler Erregungswirkungen: Kaffee-Versuche. (Methods for comparative determination of central stimulation effects; experiments with coffee.) Arch. exp. Path. Pharmak., 1938, 189, 151-156.—White mice were given: alcohol alone; caffeinfree coffee (Kaffee Hag) followed by alcohol; and ordinary coffee followed by alcohol. The median figures for the duration of narcosis as determined by the beginning and end of the lateral position were, in minutes, respectively 105, 44, and 125. The addition of caffein to Kaffee Hag did not produce the same stimulation as untreated coffee.—P. L. Krieger (Leipzig).

6343. Salmon, A. L'incontinenza di sonno. (Incontinence in sleep.) Gazz. Osp. Clin., 1936, No. 43, 1020-1023.—The following subjects are discussed: the characteristics of hypnic incontinence;

physiological and pathological conditions; corticodiencephalic and diencephalo-hypophyseal correlations in the regulatory mechanisms of waking and sleep; and the pathogenesis of hypnic incontinence. —L. Canestrelli (Rome).

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6344. Seashore, H. G., & Koch, G. Postural steadiness under conditions of muscular tension and Psychol. Rec., 1938, 2, 319-332.-An investigation "to determine the effect of certain well defined conditions of effort and strain upon postural steadiness as measured by body sway. A local model of the Miles ataxiameter was used in obtaining seven records from each of 53 undergrad. uate college men who severally came at the same hour on 3 alternate days for the experimental sessions. Conclusions were: (1) postural unsteadiness is increased under conditions of effort or tension in various musculatures; (2) the amount of sway varies according to the posture assumed; (3) distractions tend to increase the amount of sway, particularly when the subject's attention is directed toward the musculatures involved or to the experimental details; (4) "over a relatively longer period of standing in relaxed normal posture with the eyes closed, there is a small increase in minute-to-minute postural unsteadiness, amounting to about 6%." -P. S. de Q. Cabot (Simmons).

6345. Seib, K. Die Beeinflussung des Muskelrhythmus durch Vitamin C. (The effect of vitamin C on muscle rhythm.) Z. Biol., 1938, 99, 47-54.—P. L. Krieger (Leipzig).

6346. Smith, K. R. Age and performance on a repetitive manual task. J. appl. Psychol., 1938, 22, 295–306.—Four groups of men, representing average ages of 20, 30, 40, and 50, took part in the work of assembling and disassembling 2 nuts and bolts. The procedure was arranged to simulate as closely as possible the conditions in industry. The work continued over a period of 4 hours and a financial incentive was used. There is a decrease in proficiency after 30 years. The only reliable difference was obtained between the 30-year and 50-year groups for the long test series (4 hours of assembly work).—S. Roslow (Psychological Corporation).

6347. Snyder, L. H. Present trends in the study of human inheritance. Eugen. News, 1938, 23, 61-66.-In his presidential address to the 26th annual meeting of the Eugenics Research Association, the author presented the "salient facts and recommendations of the National Research Council Committee on Human Inheritance. They included: (1) the construction of maps of the human chromosomes to launch an effective intensive attack on linkage in man'; (2) the search for new genetic factors in man through study of deficiencies of taste, color perception, odor, etc.; (3) the elaboration of further genefrequency techniques and other statistical methods for the analysis of hereditary human factors; (4) the determination of the phenotypic frequency of various traits in the population; (5) the establishment of twin clinics at qualified hospitals under direction of

competent physicians and geneticists; (6) a carefully planned systematic attack on the problems of the inheritance of so-called 'mental' traits in man; (7) miscellaneous activities which would include recording of important human family histories in the most useful form and the expansion or extension of the program as circumstances may dictate."—

M. V. Louden (Pittsburgh).

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des Igels. (Hibernation of the hedgehog.) Skand. Arch. Physiol., 1938, 78, 272-282.—P. L. Krieger

6349. Sutherland, G., Wolf, A., & Kennedy, F. The respiratory "fingerprint" of nervous states. Med. Rec., N. V., 1938, 148, 101-103.—A brief preliminary report is given of a simple method of recording spirograms on patients. The findings, based on several hundred records, disclosed that the spirograms recorded for a given patient in a given mental state have a characteristic appearance, and that although the mental state may change, the respiratory "personality" is easily identifiable; and the technique therefore lends itself to the objective following of the patient's clinical course. Characteristic spirograms for various mental conditions are shown.—M. H. Erickson (Eloise Hospital).

6350. Tsang, Y. C. Hunger motivation in gastrectomized rats. J. comp. Psychol., 1938, 26, 1-17 .-Over 90% of the stomach was removed from seven rats and their behavior in a maze and in activity cages was studied. After one day's fasting the gastrectomized rats were almost as well motivated as normals in the first trial of the maze. With additional trials on the same day the operated rats increased much faster than the normal rats in both time and error scores. The activity records showed that the gastrectomized animals were three times more active one hour before feeding than one hour after feeding; but they were less active than normal rats. The results show that the enteric tract is the principal source of the motivation, an empty stomach being probably the necessary condition. Contractions of the stomach per se are not the cause of the motivation .- C. W. Brown (California).

6351. Turner, E. Studies in eye, hand and foot preferences. Part 4. Eye, hand and foot preferences of emotionally unstable adolescents compared with stable adolescents. J. juv. Res., 1938, 22, 122-125.—Emotionally unstable and emotionally stable adolescents were chosen by the use of the Matthews questionnaire and the Westenhaver revision of Matthews' and Murray's questionnaire. Four tests for eyedness, one for visual acuity, five for handedness, and five for footedness were used. children who are emotionally unstable tend to be cross-lateral than do children who are emotionally stable. More children who are emotionally unstable tend to have undetermined preference for eye, hand, and foot than do emotionally stable children."-F. M. Teagarden (Pittsburgh).

6352. Vignes, H. Influence de la lumière sur la tension artérielle en particulier chez les femmes enceintes. (The influence of light on arterial pressure, particularly with pregnant women.) C. R. Soc. Biol., Paris, 1938, 127, 768-770.—The author's experiments show that a sudden illumination may cause an increase of 0.5-1.5 cm. in arterial pressure. This is accentuated in pregnant women, and particularly so where eclampsia threatens.—G. Goldman (Sorbonne).

6353. Volz, P. Studien über das "Knallen" der Alpheiden. Nachuntersuchungen an Alpheus dentipes Guérin und Synalpheus laevimanus Heller. (Studies of the clapping of shrimps. Investigations on Alpheus dentipes Guérin and Synalpheus laevimanus Heller.) Z. Morph. Ökol. Tiere, 1938, 34, 272-316.—The clapping of this animal has the significance of warning or menacing, e.g., when in cramped living quarters or on the approach of a sexual partner.—P. L. Krieger (Leipzig).

6354. Wiersma, C. A. G., & Harreveld, A. v. The influence of the frequency of stimulation on the slow and the fast contraction in crustacean muscle. *Physiol. Zool.*, 1938, 11, 75-81.—(*Biol. Abstr.* XII: 2991).

[See also abstracts 6197, 6198, 6205, 6208, 6213, 6233, 6245, 6266, 6289, 6290, 6362, 6386, 6493, 6508, 6606, 6679, 6693.]

PSYCHOANALYSIS, DREAMS, HYPNOSIS

6355. Binswanger, L. La conception de l'homme chez Freud à la lumière de l'anthropologie philosophique. (Freud's conception of man in the light of philosophical anthropology.) Evolut. psychiat., 1938, No. 1, 3-34.—G. Goldman (Sorbonne).

6356. Brown, J. F. Freud vs. Marx: real and pseudo-problems distinguished. Psychiatry, 1938, 2, 249-255 .- Freud and Marx have realized their own particular genius in the field of systematization. Each has gotten hold of a good idea: Freud of the theory of psychological determinism and Marx of the theory of economic determinism, and each is able to see the wide implication of his theory. Each scientific field shows three different regions: the region of scientific postulation, the region of legitimate implication, the region of suggestive speculation. The region of scientific postulation of Freud overlaps the region of suggestive speculation of Marx, and vice versa. Furthermore, the region of legitimate implication of Freud meets the region of legitimate implication of Marx. The region of legitimate antithesis is called "social psychology." A drawing illustrates this methodological implication.-M. Grotjahn (Chicago Institute for Psychoanalysis).

6357. Bumke, O. Die Psychoanalyse und ihre Kinder. Eine Auseinandersetzen mit Freud, Adler und Jung. (Psychoanalysis and its children. A controversy with Freud, Adler and Jung.) (2nd ed.) Berlin: Springer, 1938. Pp. 149. RM. 7.80.—Psychoanalysis has never demonstrated a subconscious which thinks and then disturbs consciousness. The unconscious in the psychoanalytic sense

is simply what we do not want to know about ourselves—but unfortunately know only too well. No one doubts the existence of an unconscious which is the source not only of the instincts but also of the higher feelings and decisions. Freud's theories are a refined, purely dialectic attempt to rob man of everything, even his ideals. Adler's conclusions are weak and lead to a complete lack of reverence and a colorless, lax ethics, although they are not so dangerous as Freud's theories. Jung's psychology is too controversial to advance through good approaches to a new totalitarian conception.—P. L. Krieger (Leipzig).

6358. Chassell, J. Viscissitudes of sublimation. Psychiatry, 1938, 2, 221-232.—Sublimation is the exchange of the original sexual aim for another no longer sexual, but psychically related. Some case material is given in order to discuss the questions: What is the function of repression? What is the mechanism of sublimation formation? What instincts are sublimated? The aim of all education is sublimation.—M. Grotjahn (Chicago Institute for Psychoanalysis).

6359. Dooley, L. The genesis of psychological sex differences. Psychiatry, 1938, 2, 181-195 .-The author gives as an introduction a summary of Freud's theories of the psychosexual development of the female. Psychoanalytic psychology has become phallocentric, the masculine sex being the only positive sex, the feminine a negation. The boy develops his sexuality on the basis of preserving his penis, the girl hers on the basis of trying to obtain a penis. Freud does not accept the findings of many women analysts, such as Melanie Klein and Horney, who show penis-envy in some cases as a defense against guilty feminine impulses. Histories of male and female patients form the transition to the formulation of the author's conclusion: The current theory that girls develop no truly feminine sexuality until the third year or later is open to question. The idea that repudiation of femininity has a biological origin, as Freud thinks, is modified by the suggestion that such a repudiation may be largely an over-compensation of a slowly evolving culture. For the proper assessment of all the influences controlling individual development psychoanalysis may look for aid to anthropology and sociology as well as to biology.-M. Grotjahn (Chicago Institute for Psychoanalysis).

6360. Bidelberg, L. Pseudo-identifications. Int. J. Psycho-Anal., 1938, 19, 321-330.—Description is given of a mechanism which the author calls "pseudo-identification" manifested by a patient as an ideal way of adapting himself to reality; it consisted of an immediate assimilation of himself to the particular person to whom he happened to be talking, as a means of avoiding any difference of opinion. Differentiation is made between this mechanism and paranoid attitudes, hysterical identifications, and primary and secondary identifications, and an attempt is made to indicate the relationship between this mechanism and other defense mechanisms.—
M. H. Erickson (Eloise Hospital).

6361. Freud, S. Moses an Egyptian. Int. J. Psycho-Anal., 1938, 19, 291-298.—General discussion is offered of the question whether or not Moses was an Egyptian, but no definitive conclusion is reached.—M. H. Erickson (Eloise Hospital).

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6362. Isakower, O. A contribution to the pathopsychology of phenomena associated with falling asleep. Int. J. Psycho-Anal., 1938, 19, 331-345.— The author gives an account of a group of phenomena, closely akin to the well-known hypnagogic manifestations, observed in patients suffering from widely different types of psychological disorders, as well as in some normal persons. These phenomena occurred usually at the point of falling asleep or when already half asleep, and less rarely at the moment of waking, particularly when the patient was suffering from a fever. Clinical descriptions are given of curious palatal sensations, giddiness, sensory disturbances with the loss of distinctions between quite different regions of the body, the amorphous character of the impressions carried by various sense organs, and certain phenomena occurring in the form of an aura. He regards these phenomena as characterized by two processes; namely, a disintegration of the various parts and functions of the ego, and a diminution of the ego's differentiations. He concludes that the phenomena represent a regressive revival of ego attitudes which, from the autogenetic standpoint, are primitive, and that the entry into consciousness of this stage of ego development depends upon an accession of id-libido.—M. H. Erickson (Eloise Hospital).

6363. Jung, C. G. Wandlungen und Symbole der Libido. Beiträge zur Entwicklungsgeschichte des Denkens. (Changes and symbols of the libido. Contributions to the developmental history of thought.) (3rd ed.) Leipzig, Vienna: Deuticke, 1938. Pp. 428. RM. 12.—This book contains a detailed analysis of prodromal fantasies preceding a subsequent psychosis. The case is that of a young American girl whose fantasies are published in Arch. Psychol., Genève, 1906, under the title Quelques Faits d'Imagination créatrice subconsciente. The analysis gives a detailed description of the mythological parallels to symbolism in fantasy. It deals mainly with symbolism in heroic myths.—C. G. Jung (Küsnacht-Zürich).

6364. Lasswell, H. D. A provisional classification of symbol data. Psychiatry, 1938, 2, 197-204.—The ideal towards which the investigator strives is the discovery of ways of summarizing symbol data which will approximate the exactness with which movement can be described. As precision increases ambiguity and vagueness diminish in the theoretical structure of psychoanalysis.—M. Grotjahn (Chicago Institute for Psychoanalysis).

6365. Löwy, S. Die biologische Stellung des Traumes. (The biological significance of the dream.) Ned. Tijdschr. Psychol., 1938, 6, 176-186.

—Dreams serve as affective regulators of the nervous system. Sleep is interrupted mostly as a result of a disturbance in the smooth functioning of the affec-

tive process. A dream which is remembered probably constitutes the end product of this process, and its diagnostic value in the treatment of psychogenic diseases is much greater than that of a laboratory analysis of the products of physical processes. The energy which influences the formation of dreams as an organic stimulus is similar, if not identical, to that which offers itself as dream material from among our mental experiences. In most cases the purpose of the treatment of insomnia should be the positive acceleration and facilitation of the affective process.—H. Beaumont (Kentucky).

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6366. Opler, M. E. Personality and culture: a methodological suggestion for the study of their interrelations. Psychiatry, 1938, 2, 217-220.—A short outline is given of how to improve the collaboration between psychoanalysis and anthropology.—M. Grotjahn (Chicago Institute for Psychoanalysis).

6367. Rayleigh, Lord. Presidential address: the problem of physical phenomena in connection with psychical research. Proc. Soc. psych. Res., Lond., 1938, 45, 1-18.—The author reviews and evaluates some of the evidence for so-called physical phenomena. He reaches no definite conclusions.—J. G. Pratt (Duke).

6368. Rayleigh, Lord. The question of lights supposed to have been observed near the poles of a magnet. Proc. Soc. psych. Res., Lond., 1938, 45, 19-24.—An experiment is described in which a photographic plate was exposed in a strong magnetic field for five months without showing any effect.—
J. G. Pratt (Duke).

6369. Salter, Mrs. W. H. A sermon in St. Paul's. Proc. Soc. Psych. Res., Lond., 1938, 45, 25-42.— Unusual coincidences and the development of a topic of interest in the work of automatists are described.—J. G. Pratt (Duke).

6370. Schmideberg, M. The mode of operation of psycho-analytic therapy. Int. J. Psycho-Anal., 1938, 19, 310-320.—The tendency toward self-cure, upon which all psychotherapy is based, may be utilized in various ways, but any measure relying upon the authority of the therapist is self-limited and is only transiently effective, since it cannot permit the development of resistance. Psychoanalysis, however, is not so limited, because all of its measures are based upon natural tendencies. Thus free association, projection, transference reactions, introjection, etc., all natural tendencies, are utilized to free libido, to bring about defusion of instinctive forces, to effect displacements of energy, to link the unconscious with the conscious through preconscious associations-all of which permits the effecting of new and improved fusions of impulses and consequently a modification of original impulses and instinctual trends. The author concludes with a comparison of education, serving primarily to influence ego development, with analysis, tending primarily to liberate instinctive forces, both serving to overcome primitive instinctual conflicts, modify primitive impulses, place the id under the influence

of the ego, and promote instinctual fusion.—M. H. Erickson (Eloise Hospital).

6371. Servadio, E. L'ultima Hélène Smith. (The last Hélène Smith.) Ric. psich., 1933, 1-14.— A psychoanalytic interpretation is given of the personality of Hélène Smith, including the production of the "final cycle."—L. Canestrelli (Rome).

6372. Thompson, C. Development of awareness of transference in a markedly detached personality. Int. J. Psycho-Anal., 1938, 19, 299-309.—The author discusses in detail the significant events during the course of a five-year analysis which led to the development of an awareness of transference and the resultant therapeutic effect in a markedly detached personality of a cold, impersonal type, who only occasionally was able to go through the motions of social graciousness.—M. H. Erickson (Eloise Hospital).

6373. Thompson, C. Notes on the psychoanalytic significance of the choice of an analyst. Psychiatry, 1938, 2, 205-216.—In all psychoanalytic patients probably both reality and neurotic security feelings figure in the choice of the analyst. When the causes for the feeling of confidence are based on positive assets in the analyst in reality, the situation is most auspicious for analysis. When the feeling of confidence in the analyst is the result chiefly of the reliving of old patterns or the reinforcing of defense mechanisms, the situation is not auspicious for analytic success, but can be worked out if the analyst gains insight into his part of the problem. Age, sex, and prestige of the analyst are of importance only in the beginning of the analysis and when they form the reason for the patient's choice .-M. Grotjahn (Chicago Institute for Psychoanalysis).

6374. Warcollier, R. Experiments in telepathy. (Ed. by G. Murphy, trans. by J. B. Gridley.) New York: Harper, 1938. Pp. viii + 250. \$3.00.— This volume includes a series of studies (1921–36) on the nature of telepathy. A somewhat longer edition has been published by the Boston Society for Psychic Research. Topics such as telepathic accord, active and passive telepathy, telepathic drawing, and the development of the telepathic faculty are discussed.—S. Rosenzweig (Worcester State Hospital).

[See also abstracts 6245, 6383, 6680, 6681.]

FUNCTIONAL DISORDERS

6375. Agerberg, J. Chockbehandling av psykoser. (Shock treatment of psychoses.) Soc.-med. Tidskr., 1938, 15, 140-150.—The author relates in detail the first Swedish experimentation with Sakel's insulin treatment at Frösö Hospital, over a period of two years, and one year's experience (50 trials) with Meduna's cardiazol treatment. Results with both treatments were very satisfactory, with no deaths or detrimental after-effects. The two methods are discussed, together with the author's theory that no genuine psychosis, even schizophrenia, is a "brain illness" in the true sense, but

that psychosis is an expression of pathological conditions of function within the vegetative nervous system. The works of the following are mentioned as valuable for any one wanting to use these methods: M. Sakel, L. v. Meduna, M. Müller, W. Skalweit, and J. Frostig.—M. L. Reymert (Mooseheart

Laboratory for Child Research).

6376. Alexander, H. Die Rückwirkung der tuberkulösen Allgemeininfektion auf die Psyche des Kranken. (The reaction of generalized tuberculous infection on the psyche.) Beitr. Klin. Tuberk., 1937, 89, 593-604.—The toxins of tuberculosis do not produce psychoses. Milder mental changes, however, are frequent in children and especially in adults (decrease of psychic tension, irritability, sensitiveness). The assumption of direct action of the toxins on the central nervous system is not justified. A special "tuberculous character" or a "magic mountain" type (Thomas Mann) does not exist.—P. L. Krieger (Leipzig).

6377. Alfvén, J. "Desensibiliserande terapi" vid recidiverande psykoser. ("Desensitizing therapy" with recidivistic psychoses.) Svenska Läkartidn., 1938, 35, 1363-1372.—The writer gives the results of the application at Sandyhofs Mental Hospital of allophenyl (phenylallylmalonylcarbamid) over a period of about four months to about 100 patients who were apt to disturb the peace of the hospital at any time. All of the patients got 0.6-0.8 gr. a day at first, and the dose was increased by 0.1-0.2 gr. a day until they might receive as much as 3-4 gr. This therapy is pronounced successful in almost 100% of the cases in regard to the calming of habitually disturbing patients and the securing of a peaceful atmosphere for the entire hospital. No ill effects were experienced.-M. L. Reymert (Mooseheart Laboratory for Child Research).

6378. [Anon.] Sterilization law in Finland. Eugen. News, 1938, 23, 47-48.—Finland's efforts to curb propagation of feeble-minded individuals date back to 1686. Her 1935 law permits sterilization of an idiot, a feeble-minded or an insane person, "if it is feared that his mental deficiency may be transmitted to his offspring or that his offspring will remain without support by reason of his incapacity." It may also be applied to certain criminals and to those of unnatural sex instinct. Upon application of the patient, sterilization may be permitted in the case of deaf-mutism, epilepsy, congenital blindness, Huntington's chorea, spinal ataxia, cerebral ataxia, muscular atrophy, spastic spinal paralysis, certain congenital malformations, hemophilia (carriers), and if heredity is evident, alcoholism and psychopathy. The Medical Board grants permission and specifies the method to be used .- M. V. Louden (Pittsburgh).

6379. Betzendahl, W. Krüppeltum, Erlebnis und Entartung bei der Paranoia. (Crippling, experience, and degeneration in paranoia.) Mschr. Psychiat. Neurol., 1938, 99, 473-487.—The paranoiac delusion consists of two factors, the expression of a regression to a more primitive or even archaic cultural level, and

the technique whereby the social cripple adjusts to his environment. While the hermeneutical interpretation may apply to paranoid schizophrenes, in paranoia an understanding of the teleology of the deformed personality is of supreme importance.—
P. L. Krieger (Leipzig).

a study in psychiatric classification. Psychiatry, 1938, 2, 233-236.—The present system of psychiatric classification should for the present be retained. More attention should be given to the discovery and interpretation of the specific dynamic factors in each separate case than to their combination in the form of types. The attempt to distinguish sub-types within the schizophrenic group should not be given up.—M. Grotjahn (Chicago Institute for Psychoanalysis).

6381. Bräuer, D. Psychiatrischer Beitrag zur Differentialdiagnose der chronischen Kohlenoxydvergiftung. (Psychiatric contribution to the differential diagnosis of chronic CO poisoning.) Basel. Berchten, 1938. Pp. 23.—R. R. Willoughby (Brown):

6382. Brugger, C. Die Fruchtbarkeit der erblich Schwachsinnigen. (The fertility of the hereditarily feeble-minded.) Schweiz. Arch. Neurol. Psychiat., 1936, 37, 229-237.—During different periods the feeble-minded in Swiss families regularly produced considerably more offspring than the normal members, while among the latter those who had made lower marks in school were somewhat more fertile than those who had done better. The author recommends voluntary sterilization and corresponding popular enlightenment.—P. L. Krieger (Leipzig).

6383. Buchholz, B. Beiträge und praktische Erfahrungen zum Ganzheitsproblem. (Contributions to and practical experiences with the totality problem.) Zbl. Psychother., 1938, 10, 212-229.-Although the concept of the total person has long been current in medicine, in reality it is extremely difficult, in the individual patient, to grasp seriously the mind-body integration in its creative and social sense. The concept is part of totalitarian thought. Buchholz reports two cases in which psychogenic symptoms disappeared under totalitarian therapy. Reactions to medicine and other forms of treatment depend largely on tension relations between the ego and the id. With a strongly repressed id (hypergic system), a much more cautious medication and treatment are indicated. We are only at the entrance of an immense field of research.-M. E. Morse (Baltimore).

6384. Carmichael, F. A. The dollars and cents of mental hygiene. Ment. Hlth Observ., 1938, 5, 21-25.—The author discusses the cost to the state and nation of the maintenance of mental hospitals and the economic loss resulting from the withdrawal of the inmates from society. A plea is made for greater expenditure on preventive measures.—M. Keller (Brown).

6385. Cattell, R. B. Crooked personalities in childhood and after: an introduction to psychotherapy. New York: Appleton-Century, 1938. Pp. xi + 215. \$2.00.—This book attempts "to provide

a comprehensive and up-to-date picture of the current psychological methods of treatment of nervous and difficult children, and to do so in such a way as to bring out the underlying principles of psychotherapy." After three introductory chapters on the theories of Freud, Jung and Adler there follows a discussion of certain fundamentals related to general origins of maladjustment, the family, heredity, the limits of psychotherapy, and the obligations of society in mental hygiene.—S. Rosenzweig (Worcester State Hospital).

6386. Citron, H. Das Instinktproblem und seine Bedeutung für die Schizophrenie. (The instinct problem and its meaning for schizophrenia.) Mschr. Psychiat. Neurol., 1937, 96, 93-127.—While the infant is ruled by purely instinctive feelings and activity, the developing personality frees itself from the latter. In the adult, only instinctual urges to behavior and thinking remain, especially in reaching out into the environment (the "thou" experience, etc.), and, on the highest plane, into the transcendental world of the primeval representations (creative, religious instinct). The chief symptom of the schizoid, the retreat of the ego from its opposite, is due to instinctual poverty as compared with This is apparent also in a characteristic time-experience, religiosity, autism, inactivity, and weak or rigid gestures. The essence of the schizoid attitude is a pathological accentuation of the reversible mode of reaction. The creative and artistic aspects of schizoid experience should be evaluated as positive.—P. L. Krieger (Leipzig).

6387. Claude, H. Résultats actuellement obtenus à la Clinique Psychiatrique de Paris par l'insulinothérapie et la cardiazolthérapie. (The results now obtained at the Psychiatric Clinic of Paris with insulin and cardiazol therapy.) Ann. méd.-psychol., 1938, 96, Part 2, 213-238.—M. B. Mitchell (State University of Iowa).

6388. Cohen, J. Determinants of physique. J. ment. Sci., 1938, 84, 495-512.—The Thurstone centroid method and the method of least squares were used in the factor analysis of 14 linear measurements made on a group of 64 psychotic males. Two factors were revealed, which the author identifies as isometric and allometric, implying respectively "a common rate of somatic development in all bodily regions," and "growth divergence, according to which growth takes place linearly or circumferentially." There is some theoretical discussion of statistical methods, typology, and determinants of growth. No data are given on the relation of the obtained measurements to clinical type. Bibliography.—C. J. Herrick (Pennsylvania).

6389. Delmas-Marsalet, P. Le trouble aphasique ne constitue pas un déficit statique. (Aphasia is not a static deficiency.) Encéphale, 1938, 33, 123-131.—G. Goldman (Sorbonne).

6390. Delmond, J. L'image dans le langage schizophrénique. (The image in schizophrenic language.) Evolut. psychiat., 1937, No. 4, 3-16.—Schizophrenic thought, which is essentially "de-

realistic," is expressed by a language rich in metaphors and in image wholes which become increasingly symbolic and further removed from their original ideo-affective content. Frequently the patient can explain the strange language which he uses. From one point of view it seems probable that poetical experience (the identification of the imagined with the real, plus an indifference to any contrast between the self and objects) is one with psychopathic experiences. Bibliography.—G. Goldman (Sorbonne).

6391. Dubitscher, F. Der Schwachsinn. (Mental defect.) In Gütt, A., Handbuch der Erbkrankheiten, vol. I. Leipzig: Thieme, 1937. Pp. 358.-The criteria of mental defect are found in intelligence, social development, an ordered life, ethical attitude, and in some cases, hereditary weakness (body malformations or retarded development). The absence of ethical, social and other peculiarities does not rule out mental defect, and a correct life is not usually synonymous with vocationa' usefulness. A judgment from general impression is decidedly unjustifiable, since a feeble-minded individual may sometimes be "cleverer" than a normal person. In borderline cases the total personality must be evaluated. The separate criteria cannot compensate for one another. Future investigation must determine what qualitative deficiencies of behavior are characteristic of mental defect, using as a measuring rod the comparison between intelligence and permanently correct behavior. The Rorschach test is recommended for the study of individual characteristics of twins and siblings.—P. L. Krieger

6392. Dublineau, J. Le rôle de la syphilis dans la genèse de certains syndromes psychopathiques de l'adulte (formes frustes de la syphilis cérébrale). (The role of syphilis in the genesis of certain psychopathic syndromes in adults; abortive forms of cerebral syphilis.) Ann. méd.-psychol., 1938, 96, Part 2, 1-21.—M. B. Mitchell (State University of Iowa).

6393. East, E. M. Insanity and genius. J. Hered., 1938, 29, 275-279.—Studies of the inheritance of genius by Candolle, Galton, and Ellis show about 2% of neurotic strains among geniuses as against 5% in the general population. Caution should be observed in excluding insanities due to syphilitic and other infections, or to senility per se, and an adequate criterion of genius should be set up, before generalizations are drawn.—G. C. Schwesinger (American Museum of Natural History).

6394. Ettlinger, F. X. Beitrag zum Pruritus sine materia als Neurose. (A contribution on nonorganically determined pruritus as a neurosis.) Günzburg a. D.: Mayer, 1938. Pp. 18.—R. R. Willoughby (Brown).

6395. Ewald, G. Die Bewusstseinstrübung bei symptomatischen Psychosen. (The dulling of consciousness in symptomatic psychoses.) Mschr. Psychiat. Neurol., 1938, 99, 411-422.—In symptomatic psychoses the cortex is primarily responsible

for the dulling of consciousness, while this is caused by the brain stem in encephalitis.—P. L. Krieger (Leipzig).

6396. Eweler, S. Ein Fall seltsamer Sexual-verwirrung. (A case of rare sexual disorder.) Kriminalistik, 1938, 12, 40-41.—R. R. Willoughby (Brown).

6397. Ey, H. Les problèmes physiopathologiques de l'activité hallucinatoire. (Physiopathological problems of hallucinatory activity.) Evolut. psychiat., 1938, No. 2, 3-73.—The author opposes the mechanical conception of hallucinatory states and regards hallucinations as the result of an essentially illusional mechanism. This dynamic conception does away with the false physiopathological problem relating to a sensory neo-formation which appears as a result and not as a cause of hallucinations. One may distinguish local neural disintegrations, where the character of the hallucination is tied up with vegetative or unconscious life, and uniform disintegrations, where there is a total personality regression as in sleep.—G. Goldman (Sorbonne).

6398. Ey, H., & Bonnafous-Sérieux, —. Études cliniques et considérations nosographiques sur la "démence précoce." (Clinical studies and nosographic considerations on dementia praecox.) Ann. méd.-psychol., 1938, 96, Part 2, 151-181.—Brief histories are given for 81 dementia praecox cases, all of five or more years' duration. They are classified in groups, including simple and catatonic.—M. B. Mitchell (State University of Iowa).

6399. Fenton, H. Enhancement of physical and mental capacity following treatment of chronic infective disease. J. ment. Sci., 1938, 84, 544-551.—A systematic attack on nasopharyngeal sepsis in psychotic patients brought mental and physical improvement in 48% of the cases treated. Although the study is still incomplete, the findings point to the existence of "a definite and important relationship between mental disorder and chronic infective disease." Illustrated by case studies.—C. J. Herrick (Pennsylvania).

6400. Fretet, J. L'érotomanie homosexuelle travestie. (Disguised homosexual erotomania.) Evolut. psychiat., 1937, No. 4, 17-32.—An autobiography of a patient is given, to which the author adds commentaries. The most striking thing in it is a tendency to seduction exhibited by this homosexual psychoasthenic patient, a tendency which is presented under the disguise of an erotomanic theme.—G. Goldman (Sorbonne).

6401. Fröshaug, H., & Thomstad, H. Insulinschockbehandlung bei chronischen schizophrenen Psychosen. (Insulin shock treatment in chronic schizophrenic psychoses.) Acta Psychiat., Kbh., 1938, 13, 139-162.—M. L. Reymert (Mooseheart Laboratory for Child Research).

6402. Gaupp, R. Wandlungen des Hysteriebegriffes. (Changes in the concept of hysteria.) Mschr. Psychiat. Neurol., 1938, 99, 233-268.— Exceptional circumstances lead to exceptional reactions, and hysterical symptoms may occur in otherwise capable, well-organized personalities. They are not sexual in origin and cannot be measured with the usual implements of pathology. Mental anguish may effect pathological changes in the body and cloud consciousness in order to permit the suffering organism to carry on. It remains a mystery how the mind creates hysterical symptoms and how, for that matter, it affects the body.—P. L. Krieger (Leipzig).

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6403. Gebsattel, V. E. v. Die Welt des Zwangskranken. (The world of the compulsion neurotic.) Mschr. Psychiat. Neurol., 1938, 99, 10-74.—Characteristically, everything which invites the normal person to participate in and assimilate himself with his world is lacking in the case of the compulsion neurotic. The intake of food, for instance, may become a continuously painful experience because the patient fails to derive any sort of pleasant stimulation from it and is afraid of being contaminated by it. His world consists of a series of negations and is characterized by an absence of everything harmless, natural, and matter of course. It is a merciless world, oppressively narrow, full of monotony and stark rigidity, in which the patient flees from his environment and himself. His concept of reality is a deformation of the magic world of primitive peoples. -P. L. Krieger (Leipzig).

6404. Gerloff, W. Über Verlauf und Prognose der Schizophrenie. (Course and prognosis of schizophrenia.) Arch. Psychiat. Nervenkr., 1936-37, 106, 585-598.--267 male and 272 female patients, coming under the headings of catatonia, hebephrenia, and dementia simplex, were studied. The trait common to all the groups was autism. Among the catatonics the outcome was unaffected by good or poor heredity. An early or acute onset was favorable. More recoveries were to be expected after one attack than after several. Processes involving chiefly movement and motor speech had a much better prognosis than those in which affect was prominent (excluding the circular cases). Very good or very scanty endowment was rare, except that most of the cases of dementia simplex were poorly endowed. Pure cases of hebephrenia were unusual.-P. L. Krieger (Leipzig).

6405. Gordon, A. Insanity and divorce. Med. Rec., N. Y., 1938, 148, 97-101.—The general problem of insanity and divorce is discussed, followed by a critical résumé of the divorce laws in various European countries and in the United States. There follows a description of the mentality characteristic of psychoses in relation to the general problem, and the author concludes with emphasis upon the need for a detailed analysis of every mental disorder to permit the formulation of a suitable law by a jurist and a psychiatrist to meet this important social problem.—M. H. Erickson (Eloise Hospital).

6406. Graves, T. Head injuries and mental disorder. J. ment. Sci., 1938, 84, 552-562.—Head injuries, with and without surgical conditions, may

complicate existing cases of mental disorder, or may be associated with mental disorder developing often long after the injury. Classification and analysis of such cases lead to the conclusion that chronic septic conditions associated with the trauma are more important than the trauma itself in cases of traumatic neurosis and traumatic insanity.—C. J. Herrick (Pennsylvania).

6407. Hallervorden, J. Spätform der amaurotischen Idiotie unter dem Bild der Paralysis agitans. (A final stage of amaurotic idiocy resembling paralysis agitans.) Mschr. Psychiat. Neurol., 1938, 99, 74–80.—P. L. Krieger (Leipzig).

6408. Hayman, M. Insulin shock treatment of schizophrenia. Med. Rec., N. Y., 1938, 148, 141-142.—Brief general discussion of insulin shock treatment of schizophrenia is offered.—M. H. Erickson (Eloise Hospital).

6409. Hays, R. Folie à deux. Med. Rec., N. Y., 1938, 148, 104-105.—A brief discussion is given of the three varieties of folie à deux and of the factors in its production, followed by a case report summarized as follows: "A case history has been presented showing mental disease by contagion or imposition. The mother in this instance was the original source of infection, and her ideas became engrafted upon her son, were accepted by him to the extent that he regulated his conduct according to the delusions, and had begun to share the hallucinations. The father is sharing the abnormal reactions, as is also the sister."—M. H. Erickson (Eloise Hospital).

6410. Heckscher, H. Neurosis cordis et respirationis. (Cardiac and respiratory neurosis.) Ugeskr. Laeg., 1938, 100, 930-937.—The writer relates in a lecture to the Danish Society for Internal Medicine his investigation and treatment, over a period of 2-3 years, of 106 patients, equally divided as to sex, suffering from "neurosis cordis et res-pirationis." All had been treated by other physicians previously and half of them had been diagnosed as organic heart disease under terms like "nervous heart," "cardiac neurasthenia," "heart neurosis, "soldier's heart," etc. Tables illustrate the supposed causes for the neurosis (over- and underweight, posture, anomalies, etc.). The main therapeutic principle employed was correction of posture. A good result which endured at least for a year was obtained in about 77% of the cases. The writer stresses the necessity of implanting in the patients the idea of continuing the correct posture in order that the cure may be permanent.-M. L. Reymert (Mooseheart Laboratory for Child Research).

6411. Herrmann, R. Halluzinose-ähnliche Bilder im Anschluss an die Malariabehandlung bei progressiver Paralyse. (Hallucinosis-like syndromes in connection with the malaria treatment of progressive paralysis.) Erlangen: M. Döres, 1938. Pp. 28.—R. R. Willoughby (Brown).

6412. Hochman, S. Mental and psychological factors in obesity. Med. Rec., N. V., 1938, 148, 108-111.—General discussion is offered of obesity,

and six case histories are cited to illustrate a type of obesity marked by psychological components based upon certain compensatory oral gratifications. Psychotherapy directed toward the patient's habits, environment, and adjustments leads to a correction of the obesity, which may be but a symptom of a psychoneurosis. General treatment of obesity should include psychotherapy.—M. H. Erickson (Eloise Hospital).

6413. Hoffmann, K. Beziehungen zwischen manisch-depressivem Irresein und Paralyse. (Relation between manic-depressive insanity and paralysis.) Breslau: Klossok, 1938. Pp. 24.—R. R. Willoughby (Brown).

6414. Ingvar, S. Varför skola våra sinnessjuka tvingas deltaga i flykten från landsbygden? (Why should our mentally diseased be forced to participate in the migration from rural communities?) Svenska Läkartidn., 1938, 35, 1083–1087.—In connection with the recent Swedish law and the new arrangement for the care of lighter degrees of psychosis, the writer makes certain proposals for care in the province of Malmöhus, including the use of 3-4 farms for placement under the direction of a central institution.—M. L. Reymert (Mooseheart Laboratory for Child Research).

6415. Ionasiu, L., & Cupcea, S. Memoria in tulburarile mintale. (Memory in mental disturbances.) Rev. Psihol., 1938, 1, 195-198.—A test of immediate memory was given to 91 insane individuals. The main conclusions are: (1) memory for numbers (presentation auditory and visual) is lower than memory for words and images; (2) immediate memory is lower for visual presentation than for auditory presentation; these results agree with the law of regression formulated by Ribot. Numbers represent methods of symbolic expression which appear late, namely after articulated language and visual images; graphic expression is later than verbal expression. In both cases the law of regression is respected: what appears last disappears first, and conversely.— N. Marginean (Cluj, Rumania).

6416. Ionasiu, L., Stoenescu, T., & Mates, —. Contributiuni la studiul factorilor exogeni in creerea si mentinerea inapoiatilor mintali la sate. (Contributions to the study of exogenous factors which determine the feeble-mindedness in rural communities.) Bul. Soc. Psihol. med. Sibiu, 1938, 6, 35-43.—The environmental factors which determine feeble-mindedness in villages are lack of hygienic conditions, low economic status, unsatisfactory diet, and abnormal development of the thyroid gland.—N. Marginean (Cluj, Rumania).

6417. Jacob, J. S. A comparative study of the incidence of insanity among negroes and whites. (Phelps-Stokes Fellowship Stud., No. 14.) Bull. Univ. Ga., 1938, 38. Pp. 77.—This is an investigation of the relative incidence of insanity among negroes as shown by reports of the state hospitals in Georgia, Alabama, Illinois, and the United States census summaries, compared with the incidence among whites within the same areas. Data are also

presented concerning the influence of the following socio-economic factors: environment, marital status, chronological age, economic status, and educational status.—M. Keller (Butler Hospital).

6418. Jameson, W. E. A summing up of the facilities for the care of the mentally ill in Missouri. Ment. Hlth Observ., 1938, 5, 4-9.—A summary of recent improvements in the state hospitals for the mentally ill in Missouri, together with plans for improving preventive measures.—M. Keller (Brown).

6419. Karst, K. H. Nouvelles contributions au problème des troubles psychiques dus à des lésions de la région frontale. (New contributions to the problem of psychic disorders due to lesions of the frontal region.) J. belge Neurol. Psychiat., 1938, 38, 598-603.—This is mainly a discussion of the work of Poppelreuter, in whose clinic the author observed his material. His conclusions are as follows: (1) The highest psychic and intellectual processes depend on the integrity of the frontal parts of the brain. This region plays a determining role in our capacity for social adaptation and has a decisive part in the quality and continuity of initiative and spontaneity. (2) A frontal lesion produces very characteristic psychic and personality changes, which are described in the article. The variety of the psychic symptom-complexes is further determined by the individual's disposition and constitution. (3) Frontal pseudo-hysteria represents a behavior disturbance which can be demonstrated by definite psychological methods and which, being associated with a defect of voluntary concentration, is characterized by instability and inconsistency of voluntary actions without apparent reason.-H. Syz (Cornell).

6420. Kouretas, D., & Stringaris, M. G. Sur la schizophrénie tardive. (Late schizophrenia.) Ann. méd.-psychol., 1938, 96, Part 2, 182-193.—A case history is given of a 64-year-old man who developed schizophrenia. The authors claim that psychoses developing this late appear different from those developing early in life, because they develop on a fully matured personality. In these cases personality tends to remain intact.—M. B. Mitchell (State University of Iowa).

6421. Lafont, J. Une observation de psychasténie par Tristan Bernard. (An observation on psychasthenia by Tristan Bernard.) Progr. méd., 1938, No. 1, 19-20.—G. Goldman (Sorbonne).

6422. Lafont, J. L'amusie. (Amusia.) Progr. méd., 1938, No. 14, 503-504.—The author analyzes the work done by J. Ustvedt (Helsingfors, 1937) on the pathology of musical functions, using data from 19 cases which he personally observed.—G. Goldman (Sorbonne).

6423. Ley, A. Sur alexie d'évolution familiale et héréditaire. (Familial and hereditary developmental alexia.) Ann. méd.-psychol., 1938, 96, Part 2, 145-150.—A father and three children all suffered from alexia. Although they were quite normal otherwise, making an adequate social adjustment and being able to calculate and to copy forms, they were unable to learn to read in school. The oldest

child, after leaving school, suddenly learned to read at the age of 17. The two younger children, aged 13 and 9, were still in school and learned so much of their readers by heart that their deficiency was not obvious until they were asked to read isolated words in unfamiliar material.—M. B. Mitchell (State University of Iowa).

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6424. Macklin, M. T. Methods of correcting pedigree data. J. Hered., 1938, 29, 295-303.—Data on amaurotic idiocy and xeroderma pigmentosum, with arguments, are presented to illustrate the superiority of the "percentage affected method" for different-sized families.—G. C. Schwesinger (American Museum of Natural History).

6425. Mannheim, H. The treatment of mental disorders and mental deficiency in continental criminal law. J. ment. Sci., 1938, 84, 524-540.— Under the headings insanity, temporary insanity during drunkenness, and minor mental disorder and mental defect, the author gives a documented survey of modern tendencies in the criminal law of continental Europe. The trend is toward special treatment of the abnormal lawbreaker, under the guidance of medical and penological experts. Comments made on actual practice in Germany are derived from the author's long service as a judge.—C. J. Herrick (Pennsylvania).

6426. Marinesco, G., Grigoresco, D., & Axente, S. Considérations sur l'aphasie croisée. (Notes on crossed aphasia.) Encéphale, 1938, 33, 27-46.—An account is given of a detailed clinical observation on a case of left-sided hemiplegia in a right-handed patient, accompanied by homolateral hemianopia in the left field and language disturbances characterized by symptoms of Wernicke's aphasia. Plates and bibliography.—G. Goldman (Sorbonne).

6427. Marshall, W. Physiological implications of mental symptoms. Med. Rec., N. Y., 1938, 148, 106–108.—The author concludes as follows his discussion of the common idea that "mental" disease should be placed in a separate category along with other metaphysical concepts and practices: "We have attempted to show that the physiological implications of disease, 'mental' or otherwise, are no different when applied to the brain than they are elsewhere in the body. Several suggestions are given which may explain the two main types of pathological physiology which may be responsible for the psychopathies. We have discussed these under two headings, namely, the intrinsic pathology, or the intracellular type of disorders, and the extrinsic, or the extracellular type of disorders which have been exemplified by a case of carcinoma of the pancreas."—M. H. Erickson (Eloise Hospital).

6428. Minkowski, E. A la recherche de la norme en psychopathologie. (On the study of the norm in psychopathology.) Evolut. psychiat., 1938, No. 1, 67-95.—The author approaches the concept of the psychological norm through a consideration of certain fundamental problems, such as the idea of the "abnormal person" (an anomaly in relation to other individuals) and the "insane person" (an

anomaly in relation to life). He endeavors to separate the phenomenological point of view from the question of the normal and the abnormal.—G. Goldman (Sorbonne).

Schmerz- und Schmerzbe-6429. Mohr, F. handlung vom psychotherapeutischen Standpunkt aus. (Pain and its treatment from the psychotherapeutic standpoint.) Zbl. Psychotherap., 1938, 10, 220-234. - Mohr discusses the theories of pain, its elaboration, symbolic utilization, and treatment. The functional viewpoint reconciles the distinction between organic and psychogenic. In psychogenic pain, organic manifestations, due to participation of the vegetative nervous system, are always present, while organic pain is always elaborated psychically. Unconscious elaboration has both teleological (warning) and symbolic aspects. The therapeutic indications are, first, to determine whether the simple immediate experience, reactivation of earlier engrams, or elaboration predominates; next, to reduce the irritability of the nerve cells. The choice of treatment depends on psychological considerations. Every form acts subconsciously on the elementary psychic processes (excluding suggestion), and can be strengthened consciously. This should be impressed on the patient as a prophylactic against addiction, which symbolic utilization favors. For recent and mild pain, explanation or hypnosis is often sufficient; for the more severe, continuous hypnosis with autogenous training is necessary; for the most serious cases, only depth psychology suffices. Every sufferer inevitably takes some attitude toward his pain; if a positive one, he can combat the pain with a world philosophy.—M. E. Morse (Baltimore).

6430. Morsier, G. de. Le syndrome vestibulovisuel pariétal d'origine traumatique. Contribution à l'étude des centres vestibulaires corticaux et des hallucinations lilliputiennes. (A parietal vestibulovisual syndrome having a traumatic origin. Contribution to the study of vestibular cortical centers and Lilliputian hallucinations.) Encéphale, 1938, 33, 57-72.—Three studies which were made by the author seem to indicate that during the course of parietal lesions a postural change is brought about, which has a repercussion in the visual sphere through a modification of the distance and size of hallucinations. This same vestibulo-visual interaction can be caused experimentally by the action of mescalin.—G. Goldman (Sorbonne).

6431. Murlee, —, & Leconte, S. Les psychoses des grévistes. (Psychoses in strikers.) Progr. méd., 1938, No. 11, 377-381.—G. Goldman (Sorbonne).

6432. Norton, C. D. Mental health and the college student. *Ment. Hlth Observ.*, 1938, 5, 17-20.—The importance of a mental hygiene program in college is emphasized.—M. *Keller* (Brown).

6433. Parcheminey, G. Exposé clinique d'un cas de frigidité. (A clinical description of a case of frigidity.) Evolut. psychiat., 1937, No. 4, 35-50.—G. Goldman (Sorbonne).

6434. Parfitt, D. N. Loneliness and the paranoid syndrome. J. Neurol. Psychopath., 1937, 17, 318-21.

—R. R. Willoughby (Brown).

6435. Patry, F. L. Reports and discussion of the first international congress of child psychiatry held in Paris in July, 1937. Amer. J. Orthopsychiat., 1938, 8, 525-526.—R. R. Willoughby (Brown).

6436. Patry, F. L. School psychiatry. Section on first international congress of child psychiatry. Amer. J. Orthopsychiat., 1938, 8, 540-550.—S. W. Bijou (Delaware State Hospital).

6437. Picard, J. Mécanismes névrotiques dans les psychoses: oedipe, homosexualité, théatralisme hystérique et perversité. (Neurotic mechanisms in psychoses: Oedipus complex, homosexuality, hysterical theatricalism, and perversion.) Evolut. psychiat., 1937, No. 4, 51–92.—A description is given of certain psychopathological types which, though apparently different, present the same primary configuration: an Oedipus disposition, theatricalism, and a feeling of inferiority. The latter may lead either to a narcissistic introversion or to an aggressiveness, with a possible combining of the two tendencies to form a schizoid ambivalence.—G. Goldman (Sorbonne).

o438. Pilcz, A. Über einen ungewöhnlichen Fall von Lachzwang. (An unusual case of compulsive laughing.) Wien. med. Wschr., 1937, T. 2, 790 ff.— A 15-year-old student, child of highly nervous parents, has attacks of pathological compulsive laughing, in the absence of external cause or humorous recollections. The victim is healthy in body, brain, and mind. The author consequently suggests a "laughing tic."—P. L. Krieger (Leipzig).

6439. Pitsch, F. W. Psychose: Traum- und Krankheitsverlauf. (Psychosis: dreams and the course of the disease.) Zbl. Psychotherap., 1938, 10, 235-239.—A report of terrifying recurrent dreams in 3 non-institutionalized, uneducated psychotics, which brought them spontaneously to the physician. No analyses were attempted and simple explanations were without effect.—M. E. Morse (Baltimore).

6440. Pohlisch, K. Brompsychose mit ungewöhnlicher Wahnbildung. (Bromine psychosis with unusual hallucinations.) Mschr. Psychiat. Neurol., 1938, 99, 315-370.—After the poison has been eliminated from the organism the cure of hallucinatory toxic diseases becomes possible.—P. L. Krieger (Leipzig).

6441. Preda, G. Cateva propuneri ce privesc aplicarea psihiatriei sociale. (Some propositions regarding the application of social psychiatry.) Bul. Soc. Psihol. med. Sibiu, 1938, 6, 17-26.—The author proposes to concentrate the program of social psychiatry in two directions: the transformation of mental hospitals into prophylactic centers, and the creation of six new centers, which will try to reduce mental disease by therapy, propaganda, etc. He also proposes courses on social psychiatry and hygiene in schools and institutions annexed to schools.—N. Marginean (Cluj, Rumania).

6442. Preda, G., Stoenescu, T., & Cupcea, S. Inteligenta la schizofrenici. (Intelligence of schizophrenics.) Bul. Soc. Psihol. med. Sibiu, 1938, 6, 81-87.—The Pintner-Paterson intelligence scale was applied to 50 schizophrenics; their average mental age was 10 years and 2 months, with a range of 4 to 14 years. 10% of them exceed the average. In some cases fever treatment brings about an increase in IQ.—N. Marginean (Cluj, Rumania).

6443. Preda, G., Stoenescu, T., & Mosoiu, V. Contributiuni la problema igienei si profilaxiei mintale. (Contributions to the problem of mental hygiene and prophylaxis.) Bul. Soc. Psihol. med. Sibiu, 1938, 6, 44-62.—A review of present legislation and institutions concerning mental hygiene in Rumania.— N. Marginean (Cluj, Rumania).

6444. Prince, M. Clinical and experimental studies in personality. (2nd ed., ed. by A. A. Roback.) Cambridge, Mass.: Sci-Art, 1938. Pp. \$6.00.—This volume contains the most important of Prince's major investigations, arranged in four parts: (1) problems of psychopathology, (2) problems of personality, (3) problems of the co-conscious, and (4) problems of the conscious. Among the chapter headings are: the role of meaning in the psychoneuroses, the psychopathology of a case of phobia, the subconscious setting of ideas, association neuroses, why we have traits, my life as a dissociated personality, experiments in psychogalvanic reactions in a case of multiple personality, an experimental study of visions, an experimental study of hallucinations, co-conscious images, and the mechanism and interpretation of dreams. There are 20 chapters, besides the appendix on the history of the co-conscious and a section of new extracts. The frontispiece is a portrait of Prince. edition differs from the first, which has been out of print for some years, in that it contains an introduction entitled "Prince's Place in Psychology" (20 pages), a bibliography of articles on Prince, bibliographies of his works, and translations into foreign languages. Besides the editorial preface and introduction, there are explanatory notes bringing some of Prince's ideas and terms into relation with more recent conceptions.-A. A. Roback (Cambridge).

6445. Rubenovitch, P. Etude de quelques réactions psychologiques provoquées par le choc insulinique chez les schizophrènes. (Study of some psychological reactions aroused by insulin shock in schizophrenics.) Evolut. psychiat., 1938, No. 2, 77–107.—The author observed 25 patients over a period of 18 months. Insulin shock arouses a whole series of mental states, but there is particularly a regressive stage where the affective aspect predominates over the rational and produces in the psyche a dynamic element which had previously disappeared. Anxiety and affective instability in the patient must be guarded against lest they recreate a condition of inhibition or produce delirium. It is important to tell the patient the reasons for treatment and to

explain the pathological character of his behavior.— G. Goldman (Sorbonne).

6446. Rylander, G. Några intryck av psykisk sjukvård och sjukhusförhållanden i England. (Some impressions of mental care and conditions in mental hospitals in England.) Soc.-med. Tidskr., 1938, 15, 126-134.—This is a lecture to the Swedish Medical Society on the author's impressions after a visit to English mental institutions. His main impression is that in recent years England has fostered no psychiatrist of international reputation. Space is given to a description of Maudsley Hospital, which is said to be without equal anywhere in the world; its capacity is 35,000 patients, and it has many unique arrangements. Horton Hospital, with its special mosquito farm, and other institutions are also mentioned.—M. L. Reymert (Mooseheart Laboratory for Child Research).

6447. Schipowensky, N. Schizophrenie und Mord. (Schizophrenia and homicide.) Monogr. Neurol. Psychiat., 1937, 63. Berlin: Springer, 1938. Pp. 186. RM. 18.—Homicide is to be interpreted neither as a manifestation of Freud's death instinct nor as concealed suicide. Man has a tremendous drive for the realization of immortality, and the basic human function consists in a continuing experience of the individual's union with the race and the cos-The fundamental disturbance of the schizophrenic shows itself on the one hand in the dying out of this feeling, and on the other in the increasing delusion that he is the instrument of evil environ-mental powers. He thus objectifies the destructive tendency of the psychosis, the increasing danger of which he suspects, and chooses his objects by more or less normally comprehensible considerations. The precipitating motives for the homicide remain strange to both patient and physician. They have only a slight basis in the prepsychotic personality, which is usually free from criminal tendencies .-P. L. Krieger (Leipzig).

6448. Schou, H. Administration, therapi og videnskab paa vore sindssygehospitaler. (Administration, therapy and science in our mental hospitals.) Ugeskr. Laeg., 1938, 100, 946-950.-In a lecture before the Danish Psychiatric Society the writer advocates several improvements. The physician should have as few administrative duties as possible. With W. Byron, he thinks that there should be more physicians in Denmark, one to 50 patients; the present average is one to 113 patients and in one institution even one to 161. Other recommendations are: expansion of laboratories, more secretarial help. more social workers, and better medical education, including training in psychology. Scientific investigations should have a certain place in all mental hospitals, and it is advocated that at least 1% of the entire budget be set aside for scientific research.-M. L. Reymert (Mooseheart Laboratory for Child Research).

6449. Schröder, P. Kinderpsychiatrie. (Child psychiatry.) Mschr. Psychiat. Neurol., 1938, 99, 269-293.—The author justifies the term "child

psychiatry" on the basis of medical, psychological and pedagogical considerations, and discusses the newer work done and institutions established in this field in Germany.—P. L. Krieger (Leipzig).

6450. Schuster, J. Zur Entdeckung der Insulinschocktherapie bei akuten Geisteskrankheiten insbesondere bei der Schizophrenie. (The discovery of insulin shock therapy in acute psychoses, especially in schizophrenia.) Budapest: Author, 1937. Pp. 90. P. 2.—R. R. Willoughby (Brown).

6451. Selling, L. S. Judicial psychiatry. Section on first international congress of child psychiatry. Amer. J. Orthopsychiat., 1938, 8, 534-539.—S. W. Bijou (Delaware State Hospital).

6452. Stefanescu-Goanga, F., Rosca, A., & Cupcea, S. Adaptarea sociala. (Social adaptation.) Cluj: Institutul de Psihologie al Universitatii, 1938. Pp. 180 + vi. Lei: 100.—There are analyzed 3330 cases of delinquency, 9636 cases of suicides, and 434 cases of psychosis. The biological constitution is established with the method proposed by Wertheimer-Hesketh. Murderers from personal and social motives are in the majority of cases pyknics, while murderers for material and economical reasons are asthenics. Recidivism is more frequent among asthenics. The delinquency rate is 34.36 per 100,000 at ages 15-24, 43.67 at ages 25-34, and 25.09 at ages 35-44; it becomes much lower later. The numbers of suicides increase with age. The greatest incidence of psychosis is at 25-34 years. There are 93.21 male delinquents per 100,000, 6.78 female delinquents. The rates for suicide are 68.82 for men and 31.17 for women. Those for psychosis are 44.70 for men and 55.29 for women. The urban suicide rate is 3.54 times as great as the rural rate. There are also 2.18 times as many murders in urban as in rural communities, and psychosis is 2.79 times as frequent.-N. Marginean (Cluj, Rumania).

6453. Stier, E. Riechstörungen und Hornersches Syndrom nach Kopftrauma. (Olfactory disturbances and Horner's syndrome after head injuries.) Mschr. Psychiat. Neurol., 1938, 99, 201-227.—P. L. Krieger (Leipzig).

6454. Stone, C. P. Integration of the teaching of psychology and psychiatry. J. Ass. Amer. med. Coll., 1938, May. Pp. 8, in reprint.—The writer indicates a number of the opportunities which exist for building a course in psychobiology on foundations outlined by the course in general elementary psychology.—E. D. Hunt (Brown).

6455. Teulié, G. Une forme de glossolalie (glossolalie par suppression littérale). (A form of glossolalia; glossolalia by suppression of letters.) Ann. méd.-psychol., 1938, 96, Part 2, 31-51.—A paranoid patient, with a very religious background, deliberately developed a language of her own. The words were taken from her native language, French, and abbreviated or changed. She frequently omitted monosyllables. Her spoken language was more intelligible than her written language.—M. B. Mitchell (State University of Iowa).

6456. Thiele, R. Zur Kenntnis der kongenitalen Wortblindheit. (A contribution to the understanding of congenital word blindness.) Mschr. Psychiat. Neurol., 1938, 99, 371-399.—P. L. Krieger (Leipzig).

6457. Thompson, H. General psychiatry. Section on first international congress of child psychiatry. Amer. J. Orthopsychiat., 1938, 8, 527-533.

—S. W. Bijou (Delaware State Hospital).

6458. Urechia, C. I. Nouvelle note relative aux psychoses grippales. (A new note on influenza psychoses.) Ann. méd.-psychol., 1938, 96, Part 2, 22-30.—M. B. Mitchell (State University of Iowa).

6459. Vesalá, J. Sterilization. Praha: Mazeč, 1938. Pp. 221. Kc. 20.—As a minimum law for Czechoslovakia Vesalá recommends compulsory sterilization of mental defectives and criminals and voluntary sterilization in certain mental diseases.—(Courtesy Arch. Krim.)

6460. Volkmann, W. Assoziationsexperimente an Schizophrenen während der Insulinschockbehandlung. (Association experiments on schizophrenics during insulin-shock treatment.) Zürich: Impr. Sainte Catherine, 1938. Pp. 89.—R. R. Willoughby (Brown).

6461. Weininger, B. I. Psychotherapy during convalescence from psychosis. Psychiatry, 1938, 2, 257-264.—Schizophrenic patients have a strong tendency to avoid any interpersonal intimacy, and if this is not overcome psychoanalysis can scarcely begin. Contact with the patient should be attempted during his psychosis, and it is questionable how far the post-psychotic therapy should be carried out. An active technique during the acute psychosis—attempting to carry on a conversation, avoiding reality, intervening when necessary, encouraging some of the patient's out-going tendencies—is useful, whereas either too much pressure or a withdrawal into passivity by the therapist decreases interpersonal intimacy.—M. Grotjahn (Chicago Institute for Psychoanalysis).

6462. Wilcke, —. Nur ein Transvestit? (Only a transvestite?) Kriminalistik, 1938, 12, 157-159. —A description of transvestism and flagellation in a middle-aged professor, well-known in his specialty, happily married, and a paterfamilias. The transvestism began as a corset fetishism in youth, then receded, to re-appear in more extensive, extravagant, and fantastic forms in middle age, when it was combined with flagellation and marked narcissism. The masochism was traced to his boyhood enjoyment of stories of South Sea islanders' submission to tattooing. He wrote numberless stories, poems, etc., on fantasies of the transvestite and masochisticfetishistic world, some of which were published. The case is interesting for the variety of perversions and also because it appears to show that in their beginnings these can be abreacted, if not abolished, by a satisfactory marriage. - M. E. Morse (Baltimore).

6463. Woodfin, L. L. Children and their emotional problems. Ment. Hith Observ., 1938, 5, 10-16.

—Certain emotional problems of children are

discussed. The Child Guidance Clinic of Kansas City, as set up by the National Committee for Mental Hygiene, is described as perhaps the most effective means of handling these problems.—M. Keller (Brown).

6464. Wyrsch, J. Über akute schizophrene Zustände, ihren psychopathologischen Aufbau und ihre praktische Bedeutung. (Acute schizophrenic conditions, their psychopathological structure and practical significance.) Abh. Neurol. Psychiat. Psychol., 1937, Heft 82. Pp. 80. sfr. 12.—Among 200 acute and subsequently completely remitted cases four ways were found in which the patient experiences incipient schizophrenia and reacts to it: (1) The disturbance is felt as a physical disease, and recognition as a psychical disorder is resisted. (2) It is treated as being of a psychical nature, but dealt with as an impulsive experience, void of meaning. (3) It is looked at as being of a psychical nature and converted into a part of the inner life, full of meaning. (4) It takes the form of a superpersonal "objective" structure (delusion, "call," role), thereby enabling the patient to keep himself abstracted from the disturbance. These are not forms of the disease, but only ways of structuring it; they depend chiefly on the patient's character, sex, experience, etc. The same is true of the so-called primary symptoms and of the experiencing of acute disturbances as an invasion of the coherence of the personality. The work vasion of the coherence of the personality. further deals with relations to manic-depressive psychosis, symptomatic schizophrenia, and the schizophrenic reaction.-J. Wyrsch.

[See also abstracts 6147, 6185, 6221, 6303, 6306, 6307, 6349, 6485, 6535, 6551, 6556, 6570, 6620, 6626, 6644, 6680, 6681, 6693.]

PERSONALITY AND CHARACTER

6465. Barbu, Z. Aspectul psihologic al onestitatii. (The psychological aspect of honesty.) Rev. Psihol., 1938, 1, 199-217.—The author accepts the theory of general traits. The higher the level of development the stronger is the consistency of the trait of honesty. Favorable comments are made on the position of Allport.—N. Marginean (Cluj, Rumania).

6466. Birzele, K. Das Reproduzieren von Bildgestalten als Hilfsmittel zur Charakterbestimmung. The reproduction of picture forms as an aid in character determination.) Industr. Psychotech., 1938, 15, 65-78.—The subject is shown two pictures. the same in outline but different in detail; the outline is then shown alone and the subject asked "Which picture is this?" Usually about ten pairs of pictures are shown and then the outlines of the ten. There were thirty pairs of pictures. The tests can be used for both sexes and for ages 4 through 17. The results of this experiment showed the Jaensch and the Kretschmer types of individuals and were found to be in agreement with the Rorschach tests. It is concluded that this tool for character determination is very efficient .- J. C. G. Seidl (Manhattan College).

6467. Crawford, M. P. A behavior rating scale for young chimpanzees. J. comp. Psychol., 1938, 26, 79–92.—The preparation of a graphic rating scale for measuring the frequency of certain kinds of behavior and personality traits in chimpanzees is described. 16 of the 22 items showed reliabilities of over .76 after the application of the Spearman-Brown prophecy formula.—C. W. Brown (California).

6468. Davidson, H. H., & Klopfer, B. Rorschach statistics. Part I: Mentally retarded, normal, and superior adults. Rorschach Res. Exch., 1937-38, 2, 164-169.—Tabulation of the number of the various types of Rorschach responses obtained from mentally retarded, normal, and superior adults as reported in the recent literature.—M. Keller (Butler Hospital).

6469. Gibson, A. B. The conjugation of personality. Aust. J. Psychol. Phil., 1938, 16, 98-126.—
The whole person includes several modes of personality, which may be likened to the first, second, and third persons of grammar. The self of the first person must in all normal cases be supplemented by an interpersonal relation of reciprocity with someone else, and in society by an objective, third-personal aspect. The term "persons" in the plural number similarly describes collective modes and relations. Psychology is properly concerned with persons in relation, and cannot be complete as merely individual psychology or adequate as social psychology; instead an "interpersonal" psychology is demanded.—H. D. Spoerl (American International College).

6470. Kaplan, A. H., Miale, F. R., & Clapp, H. Clinical validation of a Rorschach interpretation: I. Rorschach record. II. Rorschach interpretation. III. Summary of case history. IV. Comparison between Rorschach interpretation and clinical findings. Rorschach Res. Exch., 1937-38, 2, 153-163.—A personality description derived solely from Rorschach responses is compared in detail with the case history of the individual.—M. Keller (Butler Hospital).

6471. Klages, L. Vorschule der Charakterkunde. (Prolegomena to characterology.) (2nd ed.) Leipzig: Barth, 1937. Pp. 79. RM. 2.40.—R. R. Willoughby (Brown).

6472. Klopfer, B., & Miale, F. R. An illustration of the technique of the Rorschach interpretation: the case of Anne T. Rorschach Res. Exch., 1937-38, 2, 126-153.—This includes two complete records of Rorschach responses from the same individual. "The section on interpretation attempts to give an impression of the entire process, starting with a response-by-response analysis of the material in a raw state, proceeding to the use of the main quantitative results, and ending with an attempt to build up an intrinsically consistent personality picture out of all the indications in the Rorschach records." The blind diagnosis of the personality is accompanied by a summary of the case record.—M. Keller (Butler Hospital).

6473. Lersch. P. Der Aufbau des Charakters. (The structure of character.) Leipzig: Barth, 1938. Pp. 272. RM. 9.60 .- The first section, The Endothymic Basis, takes up the life-feeling; the fundamental attitudes toward life; affects; ego-feeling; the projected feelings with self-reference (sorrow, joy) and object-emphasis (malice, hate); ego-strivings; egotism; and interests (transitive strivings). The second part, The Superstructure of the Psychic Life, is concerned with the will, its internal and external behavior, style and technique; decision; the noetic superstructure; abstraction; judgment; intelligence; mentality; intellectualism; genuineness and insincerity. Lersch's purposes are to clarify characterology and enrich its vocabulary, always with reference to practical applications.-P. L. Krieger (Leipzig).

6474. Lips, P. Die Prinzipien der Charakterologie. (Principles of characterology.) Hamburg: Hans. Gildenverl., 1938. Pp. 62. M. 2.50.—R. R. Willoughby (Brown).

6475. Pavelcu, V. Ce este metoda F. O. V.? (What is the F. O. V. method?) J. Psihoteh., 1938, 2, 50-71.—A criticism of a rating method proposed for diagnosing children's personality by Narly and Zapan. The children rate themselves.—N. Marginean (Cluj, Rumania).

6476. Piotrowski, Z. Recent Rorschach literature. Rorschach Res. Exch., 1937-38, 2, 172-175.—A supplement to the Rorschach bibliographies published by P. E. Vernon. Those articles which have appeared in the Rorschach Research Exchange but not elsewhere are omitted. There are 28 titles.—M. Keller (Butler Hospital).

6477. Rosca, A. Integrarea psihica. (Psychological integration.) Rev. Psihol., 1938, 1, 181–194. —The process of integration becomes more complicated as organisms become more developed. When life begins to disintegrate the superior levels of integration are first affected. Among the factors which make integration difficult are disintegrated family, neighborhood, and community, severe discipline, lack of discipline, etc. The level of integration varies from individual to individual.—N. Marginean (Cluj, Rumania).

6478. Ryans, D. G. The meaning of persistence. J. gen. Psychol., 1938, 19, 79-96.—An analysis of the quality commonly known as persistence shows that it is not adequately explained in terms of "will." Persistence and physical endurance are basically the same, and both may be closely related to the general activity level. Persistence refers primarily to "continued release of energy," and seems to be a native capacity for work or energy release; it appears to be a so-called general factor. The author considers it possible that persistence is related to inhibition and to certain biochemical factors.—E. D. Hunt (Brown).

6479. Shuey, H. Further discussion on "some recent Rorschach problems." Rorschach Res. Exch., 1937-38, 2, 170-171.—Brief discussion of the uses

and limitations of the Rorschach test.—M. Keller (Butler Hospital).

6480. Störring, G. E. Characterologie. (Characterology.) Fortschr. Neurol. Psychiat., 1938, 10, 337-365.—The author points out the change in trend in studies of character since the article published by Birnbaum in 1931. The major interest at that time was in character structure from the point of view of expression and facial mimicry. The present trend is toward a study of racial characteristics, inheritance, and character and constitution, as well as typology. This article contains a review of publications in all these fields in addition to character structure, with special emphasis on the racial problem and the new typology of Jaensch and Ach. Bibliography.—D. S. Oberlin (Delaware State Hospital).

6481. Stuart, G. The achievement of personality, in the light of psychology and religion. New York: Macmillan, 1938. Pp. 192. \$1.75.—R. R. Willoughby (Brown).

6482. Traxler, A. E. The use of tests and rating scales in the appraisal of personality. Educ. Rec. Bull., 1938, No. 23. Pp. 80.—Following a survey of procedures for appraising personality, the author presents a selected and annotated list of personality tests and rating devices, together with a summary of the validity, reliability and uses of results of these devices. Bibliography.—(Courtesy J. educ. Res.).

6483. Zulliger, H. Het optreden en de beteekenis van den kleurschok bij den test van Rorschach. (The occurrence and significance of color shock in the Rorschach test.) Ned. Tijdschr. Psychol., 1938, 6, 162-175.—A discussion of the various forms of affective and associational stupor which may occur when the colored pictures in the Rorschach test appear. According to Rorschach, neurotics experience this color shock in contrast to psychotics, while in connection with other factors in the test different types of neuroses may be distinguished.—H. Beaumont (Kentucky).

[See also abstracts 6191, 6288, 6332, 6351, 6388, 6434, 6444, 6499, 6505, 6555, 6561, 6579, 6596, 6603, 6608.]

GENERAL SOCIAL PROCESSES

(incl. Esthetics)

6484. Allee, W. C. The social life of animals. New York: Norton, 1938. Pp. 293. \$3.00.—Associations based upon mass physiology (as in mutual protection through increased ability to neutralize toxins) are widely distributed in the animal scale; it is possible that sex has arisen on a similar basis through the facilitative effect on cell division of the proximity of individuals. In the more differentiated forms psychological mechanisms such as imitation, mutual stimulation of breeding activities, and social facilitation and inhibition have been shown. In some species characteristic dominance patterns develop in groups. The operation of opposed principles

may lead to a resultant optimal population size; this variable has been shown by Wright to have important relationships to the evolutionary process. Bibliography of 129 items, including a number of previously unreported studies from the author's laboratory.—R. R. Willoughby (Brown).

6485. Andics, M. v. Über Sinn und Sinnlosigkeit des Lebens. (The meaning and meaninglessness of Wien: Gerold, 1938. Pp. 175. M. 8 .- .- A quantitative and qualitative study of 100 attempted suicides in Vienna, based on conversations and a questionnaire in the detention clinic. Ten "domains of life" were investigated, including childhood, economic and occupational, sexuality, marriage, home. 8 complete protocols are presented in the appendix. Meaninglessness of life, causing actual or attempted suicide, is determined by the loss or disruption of certain domains of life where adequate replacement seems impossible. No one of the recurring factors is sufficient in itself to cause suicide in any case; combinations of factors vary to form individual patterns, but some sort of rejection in childhood is usually present. Meaning is given to life by productive participation in it; responsibility and security are both necessary. Suicides are likely to have a background of emotional insecurity and present economic insecurity, with subnormal sexual drive and marital difficulties. Unemployment is a serious complication. Actual psychotic manifestations are not prevalent .- H. D. Spoerl (American International College).

6486. [Anon.] Theses in sociology. Amer. J. Sociol., 1938, 44, 104-131.—The following is a classified list of the subjects of psychological bearing comprised in the theses offered in fulfilment of the Ph.D. and M.A. degrees in sociology for 1937 and 1938: attitudes, 18; social adjustment, 9; crime, 4; educational guidance, 3; child-family relationships, 2; personnel, 2; stereotypes, 2; behavior problems, 2; and personality, 2. The following have only one thesis each devoted to the subject: religion, drugs, statistics, propaganda, neurosis, crowds, job analysis, achievement prediction, status of women, adjustment of handicapped children, marriage adjustment, partner selection in marriage, adjustment of feeble-minded, play, and the contribution of psychoanalysis to the study of social data.-(Courtesy Amer. J. Sociol.).

6487. Baganz-Lehmann, M. Vom gegenseitigen Verstehen und Nichtverstehen. (Reciprocal comprehension and non-comprehension.) Industr. Psycholech., 1938, 15, 33-46.—In the realm of practical psychology the problem of comprehension and understanding between men is most important. The expansion of the boundaries of comprehension must be explained simply for all. This, together with all possible vagaries of character, race, age, etc., must be portrayed in order to find some standard for the many types of human intercourse. The mental share is of equal weight with the physical in all relationships. Unless there can be this understanding, there can hardly be true comprehension of the

course and value of life.—J. C. G. Seidl (Manhattan College).

6488. Barnhart, E. N. The structure of simple compositions: the relation of single element to the field. J. exp. Psychol., 1938, 23, 199-213.-Simple compositions formed by placing a single black dot on a white rectangular field showed that considerable agreement existed in the group of 110 subjects as to satisfactory positions. Analysis of the formal compositions, those based on dot and field relationship interests, reveals that the majority of placements were clustered in fairly well-defined regions: a few were scattered, and large regions of field were never used. The majority of compositions fall into a small number of different kinds, each with identical or similar dot positions. Similar reasons, such as desire for balance or unsymmetrical position, were generally given for placements in the same or similarly related regions.-E. N. Barnhart (Cleveland Art Museum).

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6489. Baumann, E. D. Magische identifikatie. (Magic identification.) Mensch en Maatsch., 1938. 14, 334-346.—Identification becomes possible when the lability of the individual's personality permits him to lose his customary identity, usually temporarily, in order to assume that of another person, animal, or object. In its normal appearance it is the basis of sympathy, understanding of others, and dramatics; but it may occur in exaggerated form, such as that experienced by Francis of Assisi and by primitive peoples assuming the posture and habits of their sacred tribal animal. This magic identification Freud has called a regression phenomenon. It occurs as psychic infection when man becomes a member of a crowd. On it, and on the subsequent solidarity of the mob, demagogues thrive.—H. Beaumont (Kentucky).

6490. Bender, J. F., & Kleinfeld, V. M. Principles and practices of speech correction. New York: Pitman, 1938. Pp. xii + 298. \$2.25.—A treatment of the problems of speech defects and therapy in their broad aspects. Following a brief discussion of the importance of speech correction, chapters 2 to 7 deal with: the problem of finding the speech defective student, analyzing and diagnosing speech disorders, classifying the latter as to cause, discussion of speech correction as a re-educational process, and methods of re-educating persons with functional and vocal disorders. There follow two chapters on the problem of motivating and guiding handicapped children and their parents, and a discussion of the personality and mental hygiene problem. The last two chapters deal with the relationship between hearing disabilities and speech defects and a survey of the problem of stuttering. A glossary defining 500 technical terms is appended.—C. V. Hudgins (Clarke School).

6491. Benton, W. B. Speeding up our reading. Sci. Mon., N. Y., 1938, 47, 261-263.—A brief non-technical presentation of the experimental approach to the problem of the slow reader. Buswell's work with the eye-movement camera and some of his

suggestions relative to improvement in reading speed are presented.—O. P. Lester (Buffalo).

6492. Bromley, D. D., & Britten, F. H. Youth and sex: a study of 1300 college students. New York: Harper, 1938. Pp. xiii + 303. \$3.00.— The data are questionnaire returns from 470 men and 618 women in 46 colleges and interviews from 122 men and 154 women in 15 colleges, well distributed geographically and with respect to type. After a foreword by Raymond Pearl, the problem is stated and the methods described; Part II enumerates six varieties of girls (the virginal, the waitfor-marriage, the loving, the experimenters, the sowers of wild oats, the homosexuals), and Part III six varieties of boys (the uninitiated, the hot-bloods, the pragmatists, the discriminating, the romantics, the homosexuals) and appropriate illustrative material is cited under each heading. Part IV describes the home and college attempts at sex education, the measures taken in pregnancy, and the trends discernible. There are chapter references, an index, and an appendix giving 7 of the major tabulations and sample questionnaires.-R. R. Willoughby (Brown).

6493. Calavrezo, C. Structura psiho-fizica a catorva dansuri nationale. (Psychophysical structure of certain national dances.) Anal. Educ. fiz., 1937, 6, 222-244.—The dance seems to be a definite dynamic configuration, and the principles of Gestalt psychology are applicable.—N. Marginean (Cluj, Rumania).

6494. Carroll, R. P. The flash-meter as a diagnostic instrument. Sch. & Soc., 1938, 48, 150.— The flash-meter flashes words, phrases or sentences on a screen for 1/5, 1/10, 1/25, 1/50, or 1/100 of a second. It was originally used as a training device, but the following experiment suggests it may be useful in measurement of reading. A list of words was exposed with it to second-grade pupils, who were asked to write what they saw. Using the words missed, a paragraph was constructed. In reading this the pupils missed the same words they had missed when the words were exposed singly.— M. Lee (Chicago).

6495. Cipriani, L. Razza e mentalità. (A proposito dell'incrocio con gli africani.) (Race and mentality; apropos of miscegenation with Africans.) Rass. int. Clin. Terap., 1936, 17, 584-590.—The author discusses the mental differences between Europeans and Africans and concludes that miscegenation is harmful, basing his conclusion on biological data.—L. Canestrelli (Rome).

6496. Curry, R. The physiology of the baritone voice. Radiologica, 1938, 2, 211-216.—P. L. Krieger (Leipzig).

6497. Davidson, P. E., & Anderson, H. D. Are Edwards' socio-economic levels economic? Sch. & Soc., 1938, 48, 153-156.—M. Lee (Chicago).

6498. Deneke, T. Die Ehren verschiedenen Bekenntnissen vom biologischen Standpunkt aus betrachtet. (Marriages between those of different faiths, considered from the biological point of view.) Volk u. Rasse, 1937, 12, 307-313.—For 1924-25 in Prussia the number of children (in millions) of pure Catholic marriages was 3.65, of pure evangelical marriages 2.43, of pure Jewish 2.27, of mixed marriages 1.49. At present mixed marriages constitute about 1.5 million. The cause of their lack of children is parental fear of denominational dissolution and the prohibition of the Catholic church against bringing up children of mixed marriages as non-Catholics.—P. L. Krieger (Leipzig).

6499. Eagleson, O. W. A racial comparison of personality traits. J. appl. Psychol., 1938, 22, 271–274.—The Bernreuter personality inventory was administered to 100 white college girls and 100 negro college girls. The inventory was scored for the 4 Bernreuter scales and the 2 Flanagan scales, and the differences between the means of the 2 groups were investigated for reliability. The only reliable difference obtained was the tendency for the negro girls to score higher than the white girls in self-sufficiency.—S. Roslow (Psychological Corporation).

6500. Frobenius, L. Denkformen vergangener Menschheit. (Thought forms of ancient man.) Scientia, Milano, 1938, 64, 135-144.—R. R. Willoughby (Brown).

6501. Gemelli, A. Nouvelle contribution à la connaissance de la structure des voyelles. (A new contribution to the knowledge of the structure of vowels.) Arch. néerl. Phon. exp., 1938, 14, 126-164.

—The a group shows overtones of greater intensity than the fundamental; the i group shows a group of harmonic overtones and a group of small independent oscillations; the u group contains only the fundamental and the first and second overtones. The overtones are not always harmonics of the fundamental.—H. D. Bouman (Amsterdam).

6502. Glass, D. V. Fertility and economic status in London. Eugen. Rev., 1938, 30, 117-124.—G. C. Schwesinger (American Museum of Natural History).

6503. Harms, E. The psychology of clothes. Amer. J. Sociol., 1938, 44, 239-250.—Cultural and sociological theorists have frequently given oversimplified explanations of the motives of human clothing. Dress is not motivated only by modesty, adornment, and protection, or even—a still more one-sided theory offered by Freud—by sex alone. All dress appears to be motivated primarily by the environment. Although the purposes of clothing are determined by environmental conditions, its form is determined by man's own characteristics, and especially by his mental traits. Forms of clothing are influenced by (1) physical environment, and (2) social conditions, including sex relations, custom, class, caste, and religious, metaphysical, or other supersensory relations. Dress is founded primarily on the world of emotions. It is not only a kind of covering but also a kind of mimicry through which man expresses many of his subjective social sentiments. The developed dress proceeds from two poles-the cultural-psychological and the concrete

psychological characteristics of men.—(Courtesy Amer. J. Sociol.)

6504. Herskovits, M. Dahomey: an ancient west African kingdom. (2 vols.) New York: Augustin, 1938. Pp. xxi + 402; xiv + 407. \$12.00.—This study, representing eight months' intensive field work in 1934 by the author and his wife, constitutes an account of the native life of Dahomey and serves the dual purpose of extending our knowledge of primitive life in general and of the culture of the specific region described. The first volume, containing 21 chapters, is divided into four parts: introductory, containing an account of the people, their setting, and sources of study for the past and present; economic life, covering production, distribution, co-operative elements, property, socioeconomic classes, and the fiscal policy; social organization, covering kinship groups, sib organization, cults of ancestral deification and worship, and nonrelationship groupings; and the life cycle of the individual, covering birth, play and education of the young, cicatrization and circumcision, marriage, adjustment and maladjustment in marriage, death and burial practices, and the mourning period. 50 illustrative plates are included. Volume II, containing 16 chapters, is divided into three parts: political organization, covering the primary political divisions, the king and his court, the cult of royal ancestors, and wars, conquests and the census; religious life, covering the great gods (divided into the sky pantheon, the earth pantheon, and the thunder pantheon), the organization of worship, personal gods and forces (particularly fate and the divine trickster), the souls of man, the cult of the serpent, magic and charms, and the Dahomean world view and its place in the daily life; and art, covering plastic and graphic, religious and secular arts, techniques of presentation employed, and the living quality of Dahomean art. There are 50 illustrative plates and 23 text figures. A 4-page bibliography of selected references is appended and the book is indexed.—M. H. Erickson (Eloise Hospital).

6505. Hirsch, G. Erziehung und Charakter. (Education and character.) Z. pādag. Psychol., 1938, 39, 181-187.—Germany is building up a sharply circumscribed culture based on the assumption of a uniformity of inner structure, and its expression by the same traits, in all persons of the same blood. It is indestructible as long as the blood is kept pure, and it even asserts its biological power over all racial admixtures. However, it needs awakening, nurture and ennobling; this is the task of education, an ecstatic tension and sacrifice. Scientific characterology is necessary for the construction of a theoretically ideal racial type. Since the Nordic revolution, this type is the military hero with the corresponding educational, esthetic and ethical attitudes. Educational difficulties arise only when individual development deviates from this ideal.—M. E. Morse (Baltimore).

6506. Houwelingen, E. van. Über den Unterschied zwischen der Intonation beim freien Sprechen

und beim Lesen im Niederländischen. (The difference between the intonation in free speaking and that in reading in Dutch.) Arch. néerl. Phon. exp., 1938, 14, 92-102.—The average pitch in reading is higher than that in free speech. The curves are on the whole similar.—H. D. Bouman (Amsterdam).

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6507. Hu, P. C. A study of the intelligence of Anglo-Chinese children. Eugen. Rev., 1938, 30, 109-116.—The measured intelligence of 116 Anglo-Chinese children was compared with that of 2943 English children from the same schools and socioeconomic groupings in Liverpool and London. Tests used included: for children of 11-14 years, the intelligence section of the Northumberland standardized tests and some non-verbal perception tests: for the 8-10 year group, the opposites tests of the Northumberland tests, and the Drever-Collins performance scale for all children. In general the Anglo-Chinese did better than the English controls. except for the 8-10 year group in Liverpool, where the English excelled the half-castes. The differences were often statistically significant. The London children of both racial selections are superior to the Liverpool children. The superiorities of London over Liverpool, of half-caste over English, are attributed largely to the economic factor and environmental advantage in the larger city. The Chinese superiority stems from a greater employment steadiness, from a racial tradition of interest in learning, from greater stress on this in the Chinese homes, and from compensatory attempts to overcome the racial prejudices experienced by the Anglo-Chinese children.—G. C. Schwesinger (American Museum of Natural History).

6508. Hudisawa, S. [Social boundary-phenomena between the Japanese and the Atayal and Saisiat, ruling and ruled groups.]. Jap. J. Psychol., 1938, 13, 55-72.—The author describes first the differences in population and traditional characters between the Atayal and the Saisiat, indicating the former as having a population about 25 times as large as the latter and as having positive traits as against the latter's negative one. He used 16 Atayal and 19 Saisiat male subjects from 18 to 46 years of age. In the "flower experiment" (Dembo) they were requested to take a flower put in a vase on a table about one meter high with their own hands without putting their feet out of a square frame of bamboo laid on the floor one or one and a half meters away from the table. The most outstanding differences seen between these two tribes were, in a word, the positive valence shown by the Atayal for their aim despite boundary difficulties and the negative one of the other tribe. The boundary line in this problem is at the same time the social boundary between their own group and the ruling group, to which the experimenter belongs. It was concluded that the social boundary phenomena between the Japanese and the ruled tribes can be clarified to some extent by experimental study of this sort.-R. Kuroda (Keijo).

6509. Kanetune, K. [On the musical scale of the old-Japanese musical instruments, Hue and Hitiriki.] Jap. J. Psychol., 1938, 13, 157-160.—R. Kuroda (Keijo).

6510. Kantor, J. R. The rôle of language in logic and science. J. Phil., 1938, 35, 449-463.—Linguistic phenomena are forms of interbehavior with stimulus objects. Such behavior is essentially referential and basic to the development of other kinds of interbehavior-for example, counting, naming, verbally symbolizing and describing things, events, etc. When such reactions as counting, naming, etc., are developed, they constitute co-ordinate interbehavior with referential language and with such activities as observing, calculating, knowing, thinking, inferring, etc. Symbolization interbehavior constitutes a special form of activity derived from referential action. This is essentially a case of interacting with something through a substitute stimulus. Because words are frequently used as such substitutes, symbolizing is frequently confused with referential interbehavior. The realization that number and other sorts of substitute stimuli are similar to word substitution has led to the erroneous tradition that mathematics is a language. - J. G. Miller (Harvard).

6511. Klitzke, E. Über Klangfarbenunterschiede von Frauen- und Knabenstimmen (Vokale). (Timbre differences between women's and boys' voices.) Berlin: (Phil. Diss.), 1937.—R. R. Willoughby (Brown).

6512. Koziol, H. Zum Einfluss des psychischen Geschehens auf die Artikulation. (The influence of psychic occurrences on articulation.) Arch. néerl. Phon. exp., 1938, 14, 58-64.—The author offers suggestions for the study of this phenomenon.—H. D. Bouman (Amsterdam).

6513. Kuenburg, M. v. Künstlicher Sprachaufbau und Sprachmelodie. Zur Pathologie der Sprachentwicklung. (The artificial construction and melody of speech. Pathology of speech development.) Mschr. Psychiat. Neurol., 1938, 98, 168-188. Adequate production of speech melody is possible only when the idea of it is combined with the capacity for intensive execution of speech sounds and sequence of speech movements. The normal child acquires in the prespeech period, spontaneously and by imitation, the preliminary factors of speech melody. These are at first neutral and meaningless, but they soon attain greater force through affective occurrences and emotional impulses. In motor deafmutism of children, development of speech melody is delayed, changed or absent, due to lack of prespeech practice. In adult aphasics the disturbances are apparently less extensive, since these patients still have control over part of their speech memories. -P. L. Krieger (Leipzig).

6514. Kuroki, S. [How did we teach the deaf to sing?] Jap. J. Psychol., 1938, 13, 161-167.—Two boys and girls of the Tokyo Municipal Deaf School who had formerly been unable to modulate their own voices intentionally learned to do it visually by means of a tonoscope. After a practice of about a

month they learned the musical scale and were even able to sing the national song "Kimigayo" by the tactual sensation of the larynx.—R. Kuroda (Keijo).

6515. Lagache, D. Note sur le langage et la personne. (Note upon language and the self.) Evolut. psychiat., 1938, 1, 57-66.—Phenomenological and genetic considerations make possible the formulation of a concept of the transcendance of language in relation to the self. This transcendance appears to be related, genetically, to the social origin of language and to its autonomous existence. The theory is helpful in the problem of voices heard during hallucinations.—G. Goldman (Sorbonne).

6516. Ledeboer van Westerhoven, L. F. Über die Melodie eines gelesenen Satzes in der niederländischen Sprache. (The melody of a Dutch sentence read aloud.) Arch. néerl. Phon. exp., 1938, 14, 117-125.—An analysis of the pitch changes in the reading of a sentence by 20 young subjects from different parts of Holland.—H. D. Bouman (Amsterdam).

6517. Lhermitte, J. Langage et mouvement. (Language and movement.) Encéphale, 1938, 33, 1-26.—The dynamic conceptions of language proposed by Bergson, Head, van Voerkom, Mourgue and others are in agreement with the observations made by the author and his collaborators as well as with the views held by Jousse. The latter holds that the rhythms found in language are to be interpretated as traces of gestural movements and mimicry, such as are still to be found in orators, for example.—
G. Goldman (Sorbonne).

6518. Lichtenstein, A. A case of adult reading difficulty. J. juv. Res., 1938, 22, 103-109.—A 22-year-old boy with three years of college work and from a fine cultural background was studied because of a serious reading difficulty. Reading tests, intelligence tests, and performance tests were administered. For remedial work, magazines and newspapers, flash cards, readers, work books, and other devices were used. The subject displayed a great desire "to impress on the clinician that he was making little progress, although the graphic record indicated quite the contrary." Considerable improvement was accomplished to the extent that the subject was able more effectively to continue his study of aeronautics, although he was still doing little recreational reading. Three references are cited in the bibliography.—F. M. Teagarden (Pittsburgh).

6519. Lientseng, W. Recherches expérimentales sur les tons du Pékinois. II. (Experimental studies on the tones of Pekinese.) Arch. neérl. Phon. exp., 1938, 14, 1-48.—H. D. Bouman (Amsterdam).

6520. Loebe, C. V. Zur Analyse der Musikalität: Rhythmusproblem. (The analysis of musicality: the problem of rhythm.) J. Psychol. Neurol., Lpz., 1937, 47, 550-559.—In a preliminary, essentially methodological study, the rhythmical-receptive and rhythmical-cognitive components of musicality were investigated in 20 subjects through the determination of differential sensitivity for short-time intervals.

The results demonstrated the applicability of the test for the qualitative study of rhythmical attributes. The same subjects were also used in a study of the components of rhythm, including the receptive and especially the motor elements. The arrangement of the experiment in tasks of increasing difficulty proved to be correct, but it was still impossible to deal separately in this way with the pure reproductive motor capacity and the perceptual ability.—F. S. Keller (Columbia).

6521. Loomba, R. M. Doctrine and expression in mysticism. *Phil. Quart. (India)*, 1938, 13, 58-66.— The author discusses the claim of the mystic to a special type of knowledge, the defects of language in conveying such knowledge, and the consequent negative character of almost all mystical doctrines.— *J. Brockwell* (Brown).

6522. Majumdar, D. N. A tribe in transition: a study in culture pattern. New York: Longmans, 1937. Pp. 227. \$4.00.—A field study of the culture pattern among primitive tribes in the Chiota Nagpur plateau, showing the results of the impact of complex and partly industrialized civilization upon a more primitive form of culture. The author is a Fellow of the Royal Anthropological Institute.—R. R. Willoughby (Brown).

6523. Marett, R. R. Glaube, Hoffnung und Liebe in der primitiven Religion. (Faith, hope and love in primitive religion.) Stuttgart: Enke, 1936. Pp. 187. RM. 7.40.—M. E. Morse (Baltimore).

6524. Merry, R. C. Art talent and racial background. J. educ. Res., 1938, 32, 17-22.—Study of 1393 pupils in three New Haven schools. A questionnaire sent to 100 outstanding artists and art teachers indicated that the following characteristics were most often regarded as comprising art talent: (1) love for and interest in art; (2) ability to distinguish the good from the poor in line, light and dark, and color; (3) ability to portray visual images graphically; and (4) creative ability. The pupils were tested for these characteristics by means of standardized tests where these exist. groups were represented in the sample, with strong weighting for white American, Italian, and Russian. From the data, 81 students were selected for individual case study, as possessing a high degree of art talent. It was found that negro children, comprising 2.3% of the school population, comprise 2.5% of the list for case study, and so this group is considered average for art talent. Similar comparisons indicate that the Italians are slightly higher than average, Russian children definitely below average, and American white and Jewish children about average in art talent.—S. W. Fernberger (Pennsylvania).

6525. Moley, R. Are we movie-made? New York: Macy-Masius, 1938. Pp. 64. \$1.00.—This is a summary of the part of Mortimer Adler's Art and Prudence which criticizes the so-called scientific studies of the effects of motion pictures on conduct (some of the Payne Fund studies and certain others). "The scientific work that has been done is of little or no practical value to the prudent man. On the

crucial point—the influence of motion pictures on moral character and conduct—science has not improved or altered the state of existing opinion."—C. J. Ducasse (Brown).

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6526. Murdock, G. P., Ford, C. S., Hudson, A. E., Kennedy, R., Simmons, L. W., & Whiting, J. W. M. Outline of cultural materials. New Haven: Institure of Human Relations, Yale University, 1938. Pp. 55.—A detailed classification of all types of ethnographic topics, with an appropriate symbol system. The outline has been designed to facilitate detailed comparison of materials from different cultures, both projected and already recorded.—R. R. Willoughby (Brown).

6527. Newstetter, W. I., Feldstein, M. J., & Newcomb, T. M. Group adjustment: a study in experimental sociology. Cleveland: School of Applied Sciences, Western Reserve Univ., 1938. Pp. \$2.00.—In this third report from the Wawokiye Camp Research project social relationships in a primary group are theoretically analyzed into "bond," "compresence," and "psychic interand "psychic interactions." "Bond," measured by asking individuals with whom they would prefer to room (personal preference technique), was expressed in indexes of personal preference and indexes of group status consisting in the number of preferences expressed by all members for an individual). Indexes of group status correlated .75 with counselors' ratings of group "Compresence," measured in terms of the total number of times a given boy appeared with another in groups of from 2 to 5 members, correlated .73 with indexes of personal preference. tions" were attacked in terms of a scale of cordialityantagonism and studied from behaviors recorded during 10-min. periods of observation. The indexes of group status correlated .71 with cordiality received, but negligibly with cordiality given. Social adjustment is therefore considered in terms of group status and cordiality received, and it is suggested that the way to study the social adjustment of an individual is to study the behavior of others toward him. Implications for "group work" are discussed, and a set of the materials employed is appended.—J. McV. Hunt (Brown).

6528. Osborn, A. S. The mind of the juror as judge of the facts or the layman's view of the law. Albany: Boyd Printing Co., 1937. Pp. xv + 239. \$3.50.—R. R. Willoughby (Brown).

6529. Paul, R. E. Motive and intent in tax law. Psychiatry, 1938, 2, 169-179.—The ultimate motive of all law is the achievement of security and justice, as these objectives are conceived by the enacting majority. We are not yet ready to scrap the subjective elements in tax law.—M. Grotjahn (Chicago Institute for Psychoanalysis).

6530. Popenoe, P. Success of civil and religious marriages. Eugen. News, 1938, 23, 70-71.—Of 669 marriages which ended in divorce, 68% were performed by clergymen. They had a mean duration of 7.81 years. The 32% performed by justices had a mean duration of 5.13 years. "There is a strong

selective factor present, the people who select church marriages being different in many ways from those who are married by justices of the peace."—
M. V. Louden (Pittsburgh).

6531. Popescu-Sibiu, I. Pornografia si patologia literara in cadrul igienei social-mintale. (Pornography and pathological literature in the light of mental and social hygiene.) Bul. Soc. Psihol. med. Sibiu, 1938, 6, 63-68.—A social-pathological study of modern pornographical literature.— N. Marginean (Cluj, Rumania).

6532. Preda, G., Stoenescu, T., & Mates, —. Contributiuni la problema igienei si profilaxiei mintale. (Contributions to the problem of mental hygiene and prophylaxis.) Bul. Soc. Psihol. med. Sibiu, 1938, 6, 27-34.—50 prostitutes were given tests of intelligence and instability. The average mental age was 10 years, 8 months (IQ 76). Emotional instability is very high. The sexual impulse is usually very strong, and there is much resemblance to the personality of minor delinquents.— N. Marginean (Cluj, Rumania).

6533. Remmlein, M. K. Analysis of leaders among high-school seniors. J. exp. Educ., 1938, 6, 413-422.- "Other investigations dealing with leadership . . . often based the grouping of leaders upon office-holding in a single type of activity. It is contended that such investigations have misused the term leader; the distinctions found between office-holders in specific activities may not be applied to distinctions between leaders in general and non-leaders. Furthermore, when comparisons of office-holders and non-office-holders rests on the basis of secondary characteristics such as intelligence, scholarship, etc., the degree of leadership must be extremely high and well defined; otherwise these . . . qualities are not always a valid basis for the comparison. This has been proved by the critical ratios found in the present study in many cases comparing office-holders in general with non-officeholders. These characteristics of intelligence, socioeconomic status, dominance, etc., are lines of distinction between non-office-holders and high grade leaders, but the differentiation is not truly reliable unless the leader class is restricted to the students who hold many and varied types of offices.' -H. W. Karn (Pittsburgh).

6534. Ringer, M. Über "Sigmatismus Labialis." (Labial lisping.) Arch. néerl. Phon. exp., 1938, 14, 80-91.—H. D. Bouman (Amsterdam).

6535. Robinson, C. H. Towards curing differential births and lowering taxes. II. Eugenic custody for unfit breeders. J. Hered., 1938, 29, 260-264.—Suggestions for reducing the number of births to the unfit include: (1) Segregations on a part-time basis, or a modification of the Japanese factory workers' colonization system, the women workers to be released from the colony once a month at the time of their ascertained sterile period. This would eventually lead to the sterilization of those permanently paroled; it would afford time to observe and study each case; it would establish the

policy of state wardship for all the feeble-minded women of child-bearing age. (2) A census in each community of those unfit to be parents, and from these a master list of dependent and criminal men and women from the substratum of society, known to be prolific breeders, with watchfulness and control over those having already borne two or more children. (3) A secondary list of morons in the schools, whose marriage and reproductive activities will be subject to the same policy of watchfulness and control after the birth of their second child.—

G. C. Schwesinger (American Museum of Natural History).

6536. Rogers, M. V. Phonic ability as related to certain aspects of reading at the college level. J. exp. Educ., 1938, 6, 381-395.—The purpose of this study was to determine the relationship between mispronunciations and comprehension and to determine the effect of training in phonics upon certain aspects of reading. The subjects were 72 poor silent readers from a college freshman class. Results show that when a student makes many mispronunciations in reading he does not usually understand the words which he pronounces. At the college level phonic training, which involves teaching the student the sound of letters and their combinations and how to blend the sounds into syllables and words, is an effective technique for the improvement of pronunciation, oral reading, and reading vocabulary.-H. W. Karn (Pittsburgh).

6537. Roos, J. The physiology of playing the flute. II. The flageolet tones. Arch. néerl. Phon. exp., 1938, 14, 49-57.—H. D. Bouman (Amsterdam).

6538. Sisson, E. D. Eye-movement training as a means of improving reading ability. J. educ. Res., 1938, 32, 35-41.—At the University of Minnesota, 29 poor readers selected by the Chapman-Cook speed of reading tests were divided into three groups. The first group were given eye-movement training, the second were merely practiced in rapid reading, and the third were retained as a control. The Pressey method was employed for eye-movement training and the training was for 15 minutes each day for a period of 4 weeks. The results indicate that eye-movement training is no more efficacious, as regards reading rate, than mere reading with intent to improve, "and it may, through directing the reader's attention to the mechanical processes of ocular movement, detract from the understanding of what is read."-S. W. Fernberger (Pennsylvania).

6539. Spencer, P. L. An analysis of the reading process, with special reference to remedial reading. Sch. & Soc., 1938, 48, 111-113.—In spite of 300 years of careful attention to the teaching of reading, we are increasingly aware of widespread failure among students and adults to read with facility and comprehension. Perhaps this situation is due chiefly to our too narrow definition of reading as meaningful reaction to printed word-symbols. Actually reading is synonymous with all learning; it is perception of any symbol, and thus depends on previous experiencing and the possession of a body of organized

meanings. If lacking only in the word-symbol type, one should not be told he has a reading disability. On the other hand, true reading deficiency deserves more attention and demands improvement in communicative techniques. Successful reading depends on an adequate background in the subject read about, ability to sense situations keenly and recall them, adequately functioning receptors and physiological health, as well as general language comprehension and specific techniques.—M. Lee (Chicago).

6540. Stevens, H. R. A study of notable Ohioans. Ohio archaeol. hist. Quart., 1938, 47, 159-167.— A biographical study of the 475 persons listed in the Dictionary of American Biography as born in Ohio shows that there is little connection between racial or national stock and recognized eminence. An unusually large number of the 475 notables were found to be either partly or wholly orphans. The relation between this and the development of personal initiative and leadership is, in the author's opinion, a problem for the psychologist.—E. D. Hunt (Brown).

6541. Stinchfield, S. M., & Young, E. H. Children with delayed or defective speech: motor-kinaesthetic factors in their training. Stanford University, Calif.: Stanford Univ. Press, 1938. Pp. xvi + 174. \$3.00.—The first section deals with the psychological aspects of delayed or defective speech in young children. Detailed results of a series of speech, audiometric and mental tests, covering the population of three nursery schools (100 children) are Analysis of the audiometric and speech test data shows a close correlation between speech defect and hearing loss. The value of an early beginning for speech correction programs is stressed, and supported by data showing important gains in IQ's of children after their speech had been corrected. The second section of the book presents practical therapeutic methods for handling delayed speech in very young children (12 to 30 months of age). The method stressed ("word therapy") consists essentially of techniques for directing the muscular action of articulatory and breathing muscles by actual manipulation of these parts by the hands of the trainer. "The adult sets the patterns for correct movements for the child to follow . . . we teach him through the muscular and kinaesthetic sense to associate movements with the correct auditory sound-patterns used to express a definite idea." Directions are given for the development of each individual sound and for a large number of words, with illustrations (photographic) of the method.-C. V. Hudgins (Clarke School).

6542. Tietze, C. The measurement of differential reproduction by paternity rates. Eugen. Rev., 1938, 30, 101-107.—G. C. Schwesinger (American Museum of Natural History).

6543. Van der Leeuw, G. Religion in essence and manifestation; a study in phenomenology. (Trans. by J. E. Turner.) New York: Macmillan, 1938. Pp. 709. \$6.75.—R. R. Willoughby (Brown).

6544. Vivas, E. A note on the emotion in Mr. Dewey's theory of art. Phil. Rev., 1938, 47, 527-531.—The author contends that Dewey's account of emotion in esthetic experience oscillates between three distinct views, two of which are mutually incompatible. He finds the source of these inconsistencies in Dewey's failure to distinguish between emotion, feeling and objective characters, and in his overlooking recent empirical researches into the various types of esthetic response.—M. F. Martin (West Springfield, Mass.)

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6545. Voelker, C. A. An investigation of articulatory occurrences in formal American pronunciation. Arch. néerl. Phon. exp., 1938, 14, 65-72.—5946 phonographic recordings of radio announcements from all parts of the United States were used. The front vowels comprise 49% of all vowels; 19% are occlusives. 70% of the consonant articulations are point linguals, 20% are labials, and 5% are palatals. Only 11% of American English should be nasal.—H. D. Bouman (Amsterdam).

6546. Waldstein, E. Der Selbstmord in der Schweiz. (Suicide in Switzerland.) Basle: Philogr. Verlag, 1934. Pp. 245. Fr. 10.—A comparative social and statistical study.—P. L. Krieger (Leipzig).

6547. Willoughby, R. R. Fertility and intelligence of college women. Science, 1938, 88, 281-282.—108 members of the 1927 class of Pembroke College were divided at the median intelligence test score; there was no difference between high and low scoring groups in living births. Test intelligence thus does not appear to be a factor in the reproductive histories of college women, at least over the years studied.— F. A. Mote, Jr. (Brown).

6548. Wyma, H. A. Contribution à la vitesse du débit et de la lecture dans le Néerlandais. (A study on the speed of talking and reading in Dutch.) Arch. néerl. Phon. exp., 1938, 14, 103-116.-Experiments on 128 subjects (students). Each subject read seven different tests, five of which were series of isolated words and the other two sentences. All measurements were taken from gramophone records. The speed of pronunciation was measured in syllables per second. The speed of the isolated words was lower than that of the sentences. The average speed of the subjects was measured by asking them to describe a few selected pictures. The average speed is 3.5-4.0 syllables per second, which is about the same as that found in the reading experiments. Emotion slows down the pronunciation; it is re-markable how easily small differences are noted by the observer. Good speakers show a short duration of pauses, together with normal or slightly supernormal speed of pronunciation. Experiments on these pauses in relation to punctuation will be reported in a later paper .- H. D. Bouman (Amsterdam).

[See also abstracts 6237, 6252, 6253, 6366, 6390, 6405, 6414, 6416, 6417, 6422, 6423, 6431, 6452, 6456, 6459, 6481, 6558, 6560, 6564, 6567, 6569, 6572, 6575, 6604, 6607, 6609, 6622, 6625, 6629, 6633, 6641, 6642, 6662, 6684, 6689.]

CRIME AND DELINQUENCY

6549. Baldock, E. C. The New Zealand prison system. J. crim. Law Criminol., 1938, 29, 216-225.

-L. Ackerson (Illinois Institute for Juvenile Research).

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6550. Brill, J. G., & Payne, E. G. The adolescent court and crime prevention. New York: Pitman Publ. Corp., 1938. Pp. xiii + 230. \$2.50.—The purpose of this book is "to present the essential facts relating to adolescence, to indicate definitely the place of the adolescent court in the treatment of youthful offenders, and, by implication at least, to point a way toward the solution of this vexing problem." The sociological implications of the problem are dealt with, and the work and problems of the Adolescent Court of Brooklyn are described. Topics treated are: changing concepts about crime causation and treatment of the criminal; the adolescent offender; the family, the community, and education in their relation to the adolescent; the social world of the adolescent offender; and a discussion of the predecessors of the Brooklyn Adolescent Court, the history of that court, and the description of a day in the court .- C. N. Cofer (Brown).

6551. Crowley, R. M. The courts and psychiatry. Psychiatry, 1938, 2, 265-271.—Due to the intelligent co-operation of court and psychiatrist, the patient whose case the author reports was able to receive therapeutic treatment instead of punishment.—M. Grotjahn (Chicago Institute for Psychoanalysis).

6552. Eberhard, W. Vergleich der Gewichtsverhältnisse bei Gefangenen des Zuchthauses und der Sicherungsanstalt in Brandenburg-Görden unter besonderer Berücksichtigung der Tuberkulose und Haftpsychose. (A comparison of the weight of prisoners in the house of correction and that for protective custody in Brandenburg-Görden, with special emphasis on tuberculosis and prison psychoses.) Bl. Gefängnisk., 1938, 68, 470-475.—The wracking uncertainty concerning the probable duration of imprisonment, the more frequent occurrence of prison psychoses, and the terrific mental strain are to be held responsible for the greater loss of weight of persons held in protective custody than of prisoners in the house of correction.—P. L. Krieger (Leipzig).

6553. Gierlich, W. Zur Natur- und Sozialgeschichte des "gang" in U. S. A. (The natural and social history of the gang in the U. S. A.) Kriminalistik, 1938, 12, 147-154.—A description of the organized crime situation, based on FBI statistics and quotations from J. Edgar Hoover, Dean Pound and others. The positive side, for crime control, is also presented, and particularly the work of the FBI. The basic reasons for the situation are, in Gierlich's opinion, not those usually given, which are only the more or less immediate, but the personal and social individualistic attitude, decentralization of the machinery for justice, local patriotism and regionalism, and the incurable romanticism of Americans.—M. E. Morse (Baltimore).

6554. Gorsuch, J. H. A scale of seriousness of crimes. J. crim. Law Criminol., 1938, 29, 245-252.

—By the method of paired comparisons a scale of seriousness of 16 frequent crimes and misdemeanors was derived from judgments by 80 raters from professional groups, such as psychologists, sociologists, prison workers, police and court workers, attorneys, and clergymen. A review and a comparison with other such indexes are presented.—L. Ackerson (Illinois Institute for Juvenile Research).

6555. Gottschaldt, K. Umwelterscheinungen im erbpsychologischen Bild. (Environmental phenomena in the picture of hereditary psychology.) Naturwissenschaften, 1937, 431–434.—From studies on prisoners of different origins awaiting trial, as well as on single and double ovum twins from good and poor environments, Gottschalk concludes that a new concept of environment develops out of the psyche. This is the idea of relationship to the differing hereditary structures of persons exposed to the environment, and it is analogous to Uexküll's biological theory.—P. L. Krieger (Leipzig).

6556. Hagemann, —. Unzüchtige Handlungen eines Exhibitionisten als Grund für die Entziehung der Erlaubnis zum Führen von Kraftfahrzeugen. (Exhibitionism as a ground for revocation of an automobile license.) Kriminalistik, 1938, 12, 187-188.—An exhibitionist guilty of repeated exposure before school children was given a jail sentence and deprived of his license. The argument for the latter penalty was that unsuitability for driving is not limited to traffic hazards, but includes possible use of a car to facilitate punishable acts (in this case flight), and lack of the responsibility and moral inhibitions demanded of a driver in the interest of public order.—M. E. Morse (Baltimore).

6557. Harboe, N. Les conditions subjective de la culpabilité. (The subjective conditions of guilt.) Skr. norske VidenskAkad., 1930, 2. Pp. 147; 143; 111.-Volume I discusses various phases of the doctrine of the will and its influence upon the interpretation of crime from ancient times, through the Middle Ages, and the 17th, 18th, and 19th centuries. It also discusses the doctrine of the will from a psychological point of view. Volume II deals with the historical evolution of penal laws, the theory of determinism vs. criminal law; the responsibility involved in interpreting and applying such laws in cases of individuals whose actions may be caused by various psychic anomalies; and forms of punishment and the reforms of different penal measures. Volume III considers crime in its legal aspects and the different types of crime.—F. J. Witmer (Mooseheart Laboratory for Child Research).

6558. Hazard, J. N. Reforming Soviet criminal law. J. crim. Law Criminol., 1938, 29, 157-169.— L. Ackerson (Illinois Institute for Juvenile Research).

6559. Herrick, M. P. Women and girl offenders in Massachusetts. Boston: Mass. Child Council, 1938. Pp. 48. \$0.35.—This is the report of the committee formed by Mrs. Herrick to study the problems of the woman and girl offender as presented

in Five Hundred Delinquent Women by the Gluecks. "The report is a digest of the book itself, together with an appraisal of the assets and liabilities of the present system of criminal procedure, especially the methods of handling women and girl delinquents, in the light of what happened to five hundred women who spent an enforced stay in a state peno-correctional institution in Massachusetts." It is brought out that the problem of the female offender is considerably different from that of the male.—F. W. Finger (Brown).

6560. Hobiera, W. H. G. "Djimat" und Verbrechen auf Java. ("Djimat" and crime in Java.) Kriminalistik, 1938, 12, 145-147.—Djimats are charms usually consisting of slips of paper inscribed in Arabic or Javanese (illustrated), wrapped around an incense stick and worn on the person. On certain days they are exposed to the smoke of the incense, which rite placates the animistic powers (although the Javanese are nominally Moslems) and protects against criminal designs. Elmoes, which serve the same purpose, are unintelligible magic formulae, either written and worn, or learned by heart. The most valuable djimats are made of earth taken on Friday from the grave of a maiden who died on Friday, and wrapped in a piece of the shroud. Earth from the grave thrown on the roof of a house causes the inhabitants to sleep the sleep of the dead while the burglar, protected by his djimat and elmoe, becomes invisible and inaudible. The Dutch government has forbidden the sale or possession of djimats. When worn in court, the radiations prevent the judge from knowing whether the witness is telling the truth or not. In doubtful cases the witnesses are searched.—M. E. Morse (Baltimore).

6561. Horsch, A. C., & Davis, R. A. Personality traits and conduct of institutionalized delinquents. J. crim. Law Criminol., 1938, 29, 241-244.-The Bernreuter personality inventory was given to 152industrial school delinquents and to 181 state reformatory inmates. Correlation coefficients and critical ratios showed low positive associations between institutional misconduct (demerits) and selfconfidence, dominance, emotional stability, and extraversion (r's ranging from .17 to .21), but no relationship with sociability. It is possible that institutional facilities are inadequate for providing adequate outlets for delinquents with qualities of initiative and leadership.-L. Ackerson (Illinois Institute for Juvenile Research).

6562. Jordan, H. W. Admissibility of deception ("lie-detector") tests. J. crim. Law Criminol., 1938, 29, 287-291.—A legal discussion of a recent robbery case in which the results of a "lie-detector" test were accepted as evidence in court, including a discussion of previous court cases in which admissibility of this type of evidence was considered.—L. Ackerson (Illinois Institute for Juvenile Research).

6563. Knöös, H. Till frågan om ungdomskriminaliteten i Sverige. (Regarding the question of adolescent criminality in Sweden.) Soc.-med. Tidskr., 1938, 15, 118-126.—In the new Swedish penal code of January 1, 1935, certain changes were brought about in regard to adolescent criminals (aged 18-21). In order to find a background for future arrangements, the writer made an investigation of all inmates in prisons of these ages and presents a summary in regard to their placement, kind of crime, IQ, etc. Some extensive case histories are included in the text.—M. L. Reymert (Mooseheart Laboratory for Child Research).

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6564. Lindesmith, A. R. The argot of the underworld drug addict. J. crim. Law Criminol., 1938, 29, 261-278.—A large alphabetized list of secret words used by Chicago drug addicts is presented.—L. Ackerson (Illinois Institute for Juvenile Research).

6565. Murphy, W. C. A comparative study of fifty white male truants with fifty white male nontruants. J. juv. Res., 1938, 22, 93-103.—50 white truant delinquent boys selected at random from the male delinquents committed to the Ohio Bureau of Juvenile Research over a period of two years were matched for chronological age, sex, and race with 50 non-truant delinquents. The non-truants had a higher mean intelligence quotient, mean mental age, mean educational age, and educational quotient. The truancy group made its poorest attainment in language usage, literature, geography, physiology, and hygiene. There was less difference between the two groups in spelling, history, civics, and arithmetic. The physical condition of the truant group was considerably less favorable than that of the nontruant delinquents. 22% of the truants had defective vision, as compared with 14% of the non-truants. 25 references are cited in the bibliography.—F. M. Teagarden (Pittsburgh).

6566. Novelli, G. Zum Problem der Indivualisierung der Strafe. (The problem of the individualization of punishment.) Kriminalistik, 1938, 12, 29-33.—R. R. Willoughby (Brown).

6567. Pollens, B. The sex criminal. New York: Macaulay, 1938. Pp. 211. \$2.00.—This book, written by the psychologist in charge of the sex clinic of the Penitentiary of the City of New York at Riker's Island, constitutes a general survey of the sex criminal problem. There are 15 chapters, each replete with illustrative case material, and emphasis is placed upon the need for better public educational measures to meet the problem.—M. H. Erickson (Eloise Hospital).

6568. Raumer, K. Räuber und Raubsituationen. (Robbers and robberies.) Krim. Abh. Exner, No. 28. Leipzig: E. Wiegandt, 1937. Pp. 103. RM. 2.50.—100 sentences and opinions of Munich trials were examined. Contrary to Sauer, the average robber is not a violent criminal, but a primitive criminal against property. Such a primitive crime as robbery can be executed only by primitive people. The female offenders are very few in number. Most heavily represented is the age in young men from 21 to 25 (85.7%); next comes that of youths from 18 to 21 (80.6%), while late adolescence (16–18) furnishes

34.9%. Three-fourths of all offenders were unemployed. The influence of crime stories and bad films was much in evidence. Older robbers are mostly habitual criminals.—P. L. Krieger (Leipzig).

6569. Sellin, T. Culture conflict and crime. Amer. J. Sociol., 1938, 44, 97-103.—The author holds that it is necessary to think of culture conflict as a conflict of conduct norms, that such conflict may arise as a result of group differentiation within a cultural system, or as a result of contact between norms of different systems, and that it may be studied in individuals or groups. This hypothesis is followed by a discussion of research suggestions carried out along the lines of cross-sectional and historical studies.—(Courtesy Amer. J. Sociol.)

6570. Stefanescu-Goanga, F. Constitutie biopsihică si criminalitate. (Biopsychological constitution and criminality.) Rev. Psihol., 1938, 1, 151-180.—There are 31% of feeble-minded individuals among criminals, as against 3% among normal individuals. There are 22.5% of feeble-minded persons among people imprisoned for misdemeanors, 34% among people imprisoned for robbery, and 47% among people imprisoned for homicide. The proportion of feeble-minded persons among recidivist minors is 50%. The proportion of emotionally unstable persons among criminals is 50%. There is no special morphological criminal type, but certain types are more inclined toward certain crimes.—N. Marginean (Cluj, Rumania).

6571. Taylor, F. Mental testing in male adolescent prisoners. J. ment. Sci., 1938, 84, 513-523.—After a brief review of the history of mental testing, the author presents the results of the administration of the Columbian group test, devised by Ballard, to 10,000 adolescent males at the Wormwood Scrubs Prison, where it proved a useful instrument in the rapid selection of youths requiring further study. From a group of 490 retarded subjects a correlation of 32 ± .045 was obtained between this test and the Stanford-Binet.—C. J. Herrick (Pennsylvania).

6572. Ter Keurst, A. J. Superstitious nature of delinquent and non-delinquent boys. J. crim. Law Criminol., 1938, 29, 226-240.—A check list of 92 common superstitious beliefs in the fields of religion, astrology, palmistry, folk-lore, etc., was given to 95 delinquent boys in a state industrial school and to 78 non-delinquent boys in grade IX of a public high school. As an average, the delinquents accepted 39% of these superstitions as true, while the non-delinquent "controls" accepted only 18% of them.—L. Ackerson (Illinois Institute for Juvenile Research).

6573. Tolman, R. S. Differences between two groups of adult criminals. Genet. Psychol. Monogr., 1938, 20, 353-458.—50 male criminals with at least three prior offenses were compared with 50 first offenders. Differences between the two groups were established by personal interview, intelligence tests, "self-ordinary-ideal" test, and sociological data. The group of repeaters showed significantly higher scores on political insurgency, feelings of grievance,

antagonism toward authority, hostility toward father, and reserve with both father and mother. No significant differences were found in degree of dissatisfaction with the community or with work, in tendencies to avoid group or individual contacts, in antagonism toward mother, wife, or child, in intelligence, or in scores on the self-ordinary-ideal test. Both groups showed wide dispersion, indicating no evidence for a "type" characteristic of the confirmed offender. 91 references are cited in the bibliography. — F. M. Teagarden (Pittsburgh).

6574. Wend, J. Untersuchungen an Straffisten vielfach rückfälliger Verbrecher. (Studies on the punishment history of multiple recidivists.) Krim. Abh. Exner, 1936, H. 23. Pp. 58.—P. L. Krieger (Leipzig).

6575. Wilson, L. Newspaper opinion and crime in Boston. J. crim. Law Criminol., 1938, 29, 202-215.—The attitudes toward crime shown in about 800 editorials appearing in six Boston newspapers during 1935 are discussed.—L. Ackerson (Illinois Institute for Juvenile Research).

[See also abstracts 6148, 6425, 6447, 6452, 6532, 6670, 6686, 6688.]

INDUSTRIAL AND PERSONNEL PROBLEMS

6576. Becker, F. Industrieform und Menschentypus. (Forms of industry and human types.) Z. Arbeitspsychol., 1938, 11, 65-76.—An investigation of typology of various workers, following Jaensch. The tests included adjusting a vertical line when looking through spectacles which displaced it laterally, the type of depth illusion produced by looking at a rotating spiral, and adjustment of a vertical line in a dark room with the head held at an angle. Young persons working in a rather skilled industry were predominantly of the type that is outwardly integrated. In heavy unskilled industries like blast furnaces results were negative. In rolling mills and forging the more inwardly oriented type predominated.—H. E. Burtt (Ohio State).

6577. Bianchi, G. L'esame biotipologico del lavoratore nella prevenzione degli infortuni. (Biotypological examination of workers in the prevention of accidents.) Rass. Med. Lav. industr., 1937, No. 2, 99-138.—The author discusses the frequency and prevention of accidents, gives a historical sketch of means of prevention, compares professional aptitudes and accident-prone individuals, and summarizes the work of biotypology as applied to industry. His researches on the subject indicate that a predisposition or susceptibility to accidents is linked with defects in the psychomotor field.—L. Canestrelli (Rome).

6578. Copeland, H. A. Studies in the reliability of personnel records. J. appl. Psychol., 1938, 22, 247-251.—Height, weight, and date of birth given at the time of registration at the Cincinnati employment center were compared with true measures of these variables. Although the correlations be-

tween estimated height and weight and true height and weight are high, deviations are present; for example, women portray themselves as smaller than they are. The age item was studied in a junior group. The results indicated that youths attempt to make themselves older, probably to enhance their employment possibility and desirability. These deviations in simple facts raise serious questions about the other items in the personnel record.—S. Roslow (Psychological Corporation).

6579. Dodge, A. F. What are the personality traits of the successful salesperson? J. appl. Psychol., 1938, 22, 229-238.—41 items of the Bernreuter personality inventory which best differentiated successful salespersons from poorer salespersons were analyzed to determine what are the outstanding personality traits of the successful salesperson. The analysis indicated that the better salespeople report that they are (1) less moody, (2) more self-sufficient and self-confident, (3) more aggressive, (4) more social, (5) less self-conscious, (7) less desirous of telling of their own good or bad fortune, (8) less resentful of criticism, and (9) more radical than poorer salespersons.—S. Roslow (Psychological Corporation).

6580. Ferree, C. E., & Rand, G. Testing fitness for night flying: visual acuity. Arch. Ophthal., Chicago, 1938, 20, 58-79.—Initial acuity at low illumination, speed of dark adaptation, and acuity at low illuminations after adaptation are factors conditioning fitness for night piloting. An instrument is described with which these functions can be tested conveniently. The circle with two breaks is used as test object and can be projected or illumined on a chart with a continuously variable intensity of wide range. Various test procedures are suggested; simplest is the requirement that at the beginning of adaptation and at a specified time later the candidate must be able to distinguish the breaks in the test circle at a given intensity level. Critical values suggested are: for a detail of 1 minute visual angle, 0.1 foot-candle at the beginning of adaptation, and 0.05 foot-candle after 5 minutes' adaptation. Acuity curves during adaptation on a group of 21 observers all under 28 years of age show a wide variation in capacity to meet these criteria, even when the acuities at 5 foot-candles are rated equal.-M. R. Stoll (Mass. Eye & Ear Infirmary).

6581. Gatti, A. Valutazione delle capacità lavorative industriali. (Evaluation of aptitudes in industrial work.) Riv. Lavoro, 1937, No. 2, 45-49.—L. Canestrelli (Rome).

6582. Gemelli, A. Die Psychotechnik in der italienischen corporativen Auffassung der Gesellschaft. (Psychotechnics in the Italian corporative concept of society.) Industr. Psychotech., 1938, 15, 1-10.—A refutation of the idea that psychotechnics is only a tool for the selection of workers. (1) Psychotechnics investigates the activity of the workman in its entirety, and in unison with the "fascist work-ideal" brings knowledge of his work. (2) Psychotechnics establishes the true concept of

work. (3) It analyzes all work in Italy according to the well-known "carta del lavoro" and the declarations of "Il Duce." (4) Psychotechnics cannot slight any work problem; therefore it works to the benefit of the worker, capital, and the state. (5) It provides instructions for the tasks and methods of work. (6) The region of its investigations is infinite. 9 titles are listed.—J. C. G. Seidl (Manhattan College).

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6583. Giurca, A. Aplicari psihologice in armata. (Psychological applications in the army.) Rev. Psihol., 1938, 1, 218-227.—The paper deals with the methods in use in Rumania for selecting officers. There are applied tests for general intelligence, practical intelligence, mechanical ability, power of concentration, social intelligence, and various personality traits, such as speed, perseveration, inhibition, etc.—N. Marginean (Cluj, Rumania).

6584. Hallbauer, U. Bedeutung der inneren Beherrschtheit für die Kraftfahrereignung. (The significance of inner control for driving aptitude.) Z. angew. Psychol., 1937, 53, 129-232.—About 25 drivers whose records were known were tested by various means to determine what factors accounted for driving ability and how closely the various tests usually employed for it correlate. Results indicate that the number of errors is not much influenced by the size of the field of vision, but that the duration and range of reaction times increase with complexity and rapidity of stimulation. An examination of 19 drivers' records showed a negative correlation between reaction time and driving record, but a positive correlation between accuracy of response and driving record. The conclusion is drawn that inner control (involving consideration of the total stimulating situation and the absence of nervous tension and emotional instability), which can be greatly influenced by training, is an important factor.—G. F. J. Lehner (Vermont).

6585. Høygaard, A. Øiets distinksjonsevne hos flyvere og sjøfolk. (The power of visual discrimination in flyers and sailors.) Tidsskr. norske Laegeforen., 1938, 58, 1022-1024.—On the basis of several investigations undertaken by the writer, it is proposed that tests be given to airplane pilots and sailors in Norway such as are already in effect in certain other European countries.—M. L. Reymert (Mooseheart Laboratory for Child Research).

6586. Jaensch, E. R. Wege und Ziele der Psychologie in Deutschland. (Methods and aims of psychology in Germany.) Industr. Psychotech., 1938, 15, 10-19.—A review of the work done in Germany in the twentieth century in the field of work psychology.—J. C. G. Seidl (Manhattan College).

6587. Jenkins, J. G., & Corbin, H. H. Dependability of Psychological Brand Barometers. II. The problem of validity. J. appl. Psychol., 1938, 22, 252-260.—The validity of the Brand Barometer was investigated by checking the responses given to last-purchase questions against the sales checks of the store in which the respondents most regularly shopped. From one store 120 accounts were found which had purchased at least 9 out of 13 articles

selected for study during a given 2-months period. From these accounts 70 satisfactory interviews were obtained. The validity index for each brand was the percentage of agreement between the respondents' report of last purchase and actual last purchase as shown by the sales check. The indices of validity varied from product to product, ranging from 62 to 100%. The degree of validity depended somewhat upon the number and dominance of brands under investigation.—S. Roslow (Psychological Corporation).

6588. **Kirihara, H. Sangyō shinrigaku.** (Industrial psychology.) Tokyo: Chigura-Shob, 1938. Pp. vi + 372. Y 2.00.—R. Kuroda (Keijo).

6589. Krüger, H. J. Zur Bewertung der verscheidenen Werbearten unter besonderer Berücksichtigung des Werbefilms. (An evaluation of different advertising mediums, especially advertising films.) Industr. Psychotech., 1938, 15, 60-63.—A survey was made in Berlin of the types of advertising mediums, by personal interview and questionnaire. Newspaper displays, billboards, car cards, and films were evaluated. No definite conclusions are advanced; much depended upon the individual's needs and desires at the moment when the advertisement was placed before him.—J. C. G. Seidl (Manhattan College).

6590. Leseul, -. Quelques considérations sur l'examen d'aptitudes pour la repartition des unités d'instruction. (Considerations on examinations of aptitudes for establishment of instruction units.) Bull. Off. intercommun. Orient. prof., 1938, 18, No. 67, 3-13.—An account is given of an experiment carried out on recruits in a Belgian regiment. It consisted in (1) a provisional selection at the time of entrance into the army by means of a group general intelligence test based on the American army test and Kraepelin's test and an examination on physical aptitudes (this provisional selection having as its aim the formation of relatively homogeneous units); and (2) a series of professional tests (handling of arms, etc.) and a graded selection during the training period with the purpose of a final assignment of the soldiers to different kinds of military service. According to the reports made by the commanding officers, the results from the selection tests were confirmed by their observations on the men after three months of instruction.-R. Nihard (Liége).

de liaison dans l'armée allemande. (Selection of liaison agents in the German army.) Bull. Off. intercommun. Orient. prof., 1936, 16, No. 61, 17-22.— (Trans. by Hans Hahn.) The author describes the various tests used, together with a list of the functions to be tested: visual memory, memory for ideas, powers of observation, attention range, reaction time to verbal instructions, localization of sounds and noises, attention concentration, olfactory sensitivity, rapidity of visual and auditory perception, and recognition of sounds of different kinds. The correlation coefficient (Spearman formula) is given for the various tests, and a ranking is made based

on data from the tests as compared with the officers, estimates of the men.—R. Nihard (Liége).

6592. Neubauer, V. Bewährungskontrolle einer psychotechnischen Eignungsuntersuchung an Triebwagenführern. (The validation of a psychotechnical aptitude test for truck drivers.) Industr. Psychotech., 1938, 15, 84–95.—23 men were hired in 1933 for these positions. They were tested in 1934 with attention, reaction (simple and complex), and other tests. Only those mentioned are described in this article. On the basis of four years' records the following suggestions are given: to be a good truck driver the candidate must be above the average in attention, must reach the average reaction time, and must be better than average in complex reaction time.—J. C. G. Seidl (Manhattan College).

6593. Pojoga, N. Metoda de critica medicopsihologica pentru rezolvarea chestiunii responsabilitatii testatorului după moartea lui. (The medicopsychological method of testing the responsibility of testators.) Bul. Soc. Psihol. med. Sibiu, 1938, 6, 69-80.—Medical and psychological analyses of an individual whose testament was contested are presented.—N. Marginean (Cluj, Rumania).

6594. Reymert, M. L., & Kohn, H. A. The Mooseheart graphic rating scale for housemothers and housefathers. J. appl. Psychol., 1938, 22, 288–294.—A rating scale containing 9 items, for rating housemothers and housefathers on "goodness," is presented. The 9 ratings are weighted differentially according to their importance as judged by a group of psychologists and administrative executives of Mooseheart. A composite score is thus obtained. The average reliability, determined by correlating the ratings of 2 judges, is .59.—S. Roslow (Psychological Corporation).

6595. Seeber, B. Berufseignungsprüfungen in Frankreich. Vocational aptitude tests in France.) Industr. Psychotech., 1938, 15, 53-59.—A summary of the work of the "Service Social de la Caisse de Compensation de la Région Parisienne."—J. C. G. Seidl (Manhattan College).

6596. Sonnenschein, A. Die Disziplin der Arbeitsweise. (The discipline of the manner of work.) Z. Arbeitspsychol., 1938, 11, 82-91.—A test of packing cylinders in boxes according to a certain pattern is used as a means of observing the subject and classifying his responses. Some of these are innate in character, whereas others are the result of voluntary effort through discipline. Some ethical implications are drawn.—H. E. Burtt (Ohio State).

6597. Sweet, L. Training to improve work. Person. J., 1938, 17, 109-115.—M. B. Mitchell (State University of Iowa).

6598. Wirth, R. Der diagnostische Wert und die praktische Verwendbarkeit der Arbeitskurve bei Berufsuntersuchungen. (Diagnostic value and practical applicability of the work curve for vocational studies.) Z. Arbeitspsychol., 1938, 11, 76-82.—The subjects did addition or subtraction continuously for an hour. The data were analyzed for total

amount of work done, accuracy, maximum performance in short intervals, and increases in performance. These results prove highly diagnostic of character traits. They also correlate rather highly with the results of other tests.—H. E. Burtt (Ohio State).

6599. Wirth, W. Die ersten Versuche der praktischen Anwendung eines psycho-physischen Apparates zur Kontrolle des Abkommens beim Leerschuss in der Schiessausbildung. (The first attempts at practical application of a psychophysical apparatus for the control of deviation in markmanship training with blank cartridges.) Industr. Psychotech., 1938, 15, 19-33.—This experiment was performed at the University of Leipzig with the co-operation of 8 students. A small caliber sport model rifle was used. The students were put through a rigid training period with blank cartridges. They then fired on the range, using an electromagnetic model for the blank shot and real shot. The number of hits from the first practice till the final test was approximately doubled. A correlation was found between the two final tests of .895 ± .07. It is concluded that this type of instruction is very beneficial for the student marksman.-J. C. G. Seidl (Manhattan College).

[See also abstracts 6346, 6658, 6667.]

EDUCATIONAL PSYCHOLOGY

(incl. Vocational Guidance)

of the Kentucky general scholastic and Kentucky English tests. Kentucky Person. Bull., 1938, No. 21.—Correlation between scores on the general scholastic test of 257 arts and science freshmen at the University of Kentucky and their point-hour ratio scholarship standing earned during the first semester was .626. Reliability of the test was determined by two administrations, a year apart. High school pupils were subjects, and the coefficients ranged from .876 to .930. Some individuals showed marked changes, however. Scores on the English test of 69 Kentucky Wesleyan College freshmen correlated .730 with first semester grades in freshman English; the r was .616 for 251 University of Kentucky freshmen. Retest reliabilities ranged from .925 to .932.—C. N. Cofer (Brown).

6601. Banissoni, F. L'educazione fisica nelle sue funzioni ausiliarie dell'orientamento professionale. (Physical education in its function as an aid to vocational guidance.) Orient. prof. Boll. Inform., 1937, 2, 28-33.—The school physical education program permits extended observation of capacities and traits important in vocational guidance.—C. J. Herrick (Pennsylvania).

6602. Bishop, H. A study of the relation of freshman intelligence to scholarship and to mortality. Kentucky Person. Bull., 1938, No. 21.—For 128 college freshmen, the Kentucky classification test correlated .574 with scholarship for the first year,

and the Terman group test of mental ability gave a correlation of .524 with the same measure. The correlation between the scores on the two tests was .78. The Kentucky classification test scores for students returning for their sophomore year were not significantly higher than the scores of students not returning to college.—C. N. Cofer (Brown).

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6603. Bologa, L. Experimentul psihologic in Indrumarea scolară a elevilor. (Psychological experiments in the service of the school.) Bul. Soc. Psihol. med. Sibiu, 1938, 6, 1-16.—A series of tests was given to four classes of a secondary school. The tests were designed to measure intelligence, memory, attention, association, speed of reaction and decision, psychological tension, and introversion-extraversion. The tests agreed, over many years, with independent estimates of intelligence in up to 95% of the cases.—N. Marginean (Cluj, Rumania).

6604. Cage, M. B. Reading in high gear. New York: Harper, 1938. Pp. 357. \$1.40.—The book is designed for students who have not yet attained their greatest reading power.—R. R. Willoughby (Brown).

6605. Calabresi, R. I fattori e la genesi delle attitudini professionali: considerazioni in tema di orientamento e di educazione. (Factors in and origin of vocational aptitudes: considerations dealing with guidance and education.) Orient. prof. Boll. Inform., 1937, 2, 36-41.—Vocational guidance, both in school and during apprenticeship, calls for prolonged observation, during which it should be recognized that the problems of discovering and of training vocational aptitudes are closely interrelated.—C. J. Herrick (Pennsylvania).

6606. Calavrezo, C., & Balosache, M. Greutatile de predare rezultate din diversitatea nivelurilor de pretentie in lectiunile de educatie fizica. (Various difficulties of teaching determined by various degrees of exigency in teaching physical education.) Anal. Educ. fiz., 1937, 6, 37-51.—N. Marginean (Cluj, Rumania).

6607. Caliver, A., & Greene, E. G. Education of negroes. A 5-year bibliography, 1931-1935. U. S. Off. Educ. Bull., 1937, No. 8. Pp. 63.—This bibliography includes entries on guidance, education, and psychological measurements of negroes.—C. M. Louttit (Indiana).

6608. Chave, E. J. High school experiences affecting personality. Rel. Educ., 1938, 3, 131-143.— About 350 subjects answered 16 questions designed to elicit what experiences in high school they felt were contributing to a growing sense of self worth, an ability to make social adjustments, and an increased esthetic appreciation. The author finds that though high school offers many worthwhile things for these students, there are shortcomings in the preparation of youth for the realization of their own worth, for the feeling of the worth of others, and for the enjoyment of the inheritance of the race in the refinements of life.—F. A. Mote, Jr. (Brown).

6609. Coale, W. B., Smith, M. E., & Masuoka, J. Successful practices in teaching of English to bilingual children in Hawaii. U. S. Off. Educ. Bull., 1937, No. 14. Pp. 163.—Hawaii has a polylingual problem which is colloquially solved by the use of "pidgin English." This makes the teaching of standard English difficult. Case studies are given of the actual teaching of selected teachers from all grades. Written papers and oral sentences from 29,000 children were analyzed for errors. Children from the Honolulu standard English schools made the best scores, and those from rural schools on isolated islands the poorest.—C. M. Louttit (Indiana).

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6610. Colette, J. La contribution de l'école primaire à l'oeuvre de l'orientation professionnelle. (Contribution of the primary school to the work of vocational guidance.) Bull. Off. intercommun. Orient. prof., 1938, 18, No. 68.—The author describes the plan for systematic observation used by the laboratory for psychology and pedagogy at Angleur, near Liége. Pupils are examined before their entrance into the primary school, during their attendance there, and at their departure, and are then followed up as far as possible. The work covers medical examinations, biometric measurements, psychological and scholastic tests, interviews with the parents, etc.—R. Nihard (Liége).

\$\sqrt{6611}\$. Connor, W. L., Hawkins, G. C., & McCarty, K. A. The Cleveland experiment in the development of health, character and school citizenship. J. educ. Res., 1938, 32, 23-34.—Statistical analysis of results from a school employing special methods and a control school. A special social work program was carried on in the experimental school; in both this and the control school each student systematically recorded the food eaten, hours slept, games played, and work done. The results indicate that the special program "has proved to be more effective in providing for the uniform development of character and school citizenship, regardless of intelligence than has the conventional one."—S. W. Fernberger (Pennsylvania).

6612. Dannemann, A., Gnerlich, G., Henze, A., Meltzer, E., Schober, H., & Stern, E. Enzyklopädisches Handbuch der Heilpädagogik. (Encyclopedic handbook of therapeutic education.) (2 vols.) (2nd ed.) Halle: Marhold, 1934.—The authors and their 160 German and foreign collaborators present an intensive review, under 3407 headings, of the psychological and systematic problems of therapeutic education.—P. L. Krieger (Leipzig).

6613. D'Espallier, V. Psychologie en lager ønderwijs. (Psychology and elementary education.) Vlaam. Opvoedkund. Tijdschr., 1937, 19, 21-36.— The author discusses what pedagogy may expect to get from child psychology at present, such as a general psychological approach on the part of the educator and guidance in general methodology and in methodology of the various fields of instruction.— R. Nihard (Liége).

6614. Ellis, Z., & Hoppock, R. An appraisal and abstract of available literature on the occupation of the free-lance writer. New York: Nat'l Occupational Conference, 1938. Pp. 12. \$0.10.—R. R. Willoughby (Brown).

6615. Faria de Vasconcellos, -. L'orientation professionnelle au Portugal. (Professional orientation in Portugal.) Bull. Off. intercommun. Orient. prof., 1936, No. 62, 5-13.—The author gives an account of the organization and activity of an institute for professional orientation established under the direction of Maria Luisa Barbosa at Lisbon and financed by the state. Its interests cover vocational guidance in certain schools, work with delinquents who have been brought before juvenile courts, and tests for adults applying for state posi-The vocational guidance for the school children consists of five sessions, which include personal interviews with the parents as well as with the child, and clinical, psychometric, physiological, psychological, and pedagogical examinations. Various orientation services have been organized throughout the country, the ones in connection with the juvenile courts at Coimbra and Porto being of special interest. Courses have been formed for instructing orientation counselors, and 16 laboratories have been established for giving examinations and for scientific research. The article concludes with a statistical account of the work accomplished to date.—R. Nihard (Liége).

6616. Fawcett, H. P. The nature of proof; a description and evaluation of certain procedures used in a senior high school to develop an understanding of the nature of proof. New York: Teachers College, Columbia University, 1938. Pp. xi + 146. — R. R. Willoughby (Brown).

6617. Gardiner, L. A. An analysis of achievement in principles applied to the nursing practice of first year students in schools of nursing. Washington, D.C.: Catholic Univ. America, 1938. Pp. 64. \$0.75.—R. R. Willoughby (Brown).

6618. Gates, A. I., & others. Special methods and psychology of the elementary-school subjects. Rev. educ. Res. Bull., 1937, 7, No. 5. Pp. 158.—This issue of the journal is devoted to a survey of the literature from July 1, 1934 to July 1, 1937 in the fields of arithmetic, art, character education, English language, health and physical education, music, reading, science, social studies, spelling, and activity programs in nursery school, kindergarten and elementary school. Bibliography.—(Courtesy J. educ. Res.).

6619. Gemelli, A. L'orientamento professionale e la sua continuità. (Vocational guidance and its continuity.) Orient. prof. Boll. Inform., 1937, 2, 11-20.—Extended observation of pupils in their capacities as future workers is an important aspect of vocational guidance.—C. J. Herrick (Pennsylvania).

6620. Germane, C. E. Some typical maladjustments of school children that are frequently overlooked. *Ment. Hlth Observ.*, 1938, 5, 26-30.—The author presents two methods designed to assist teachers in appraising daily the individual child's abilities, interests, and needs: (1) the pupil appraisal chart, and (2) the modified anecdotal method. Samples of each are included.—M. Keller (Brown).

6621. Good, C. V. Selected bibliography on the methodology of educational research and related problems, 1937–1938. J. educ. Res., 1938, 32, 61–80. —Bibliography of 368 titles, many with brief analytical descriptions, divided into the following sections: problems, issues and trends; courses of information; collecting, analyzing, interpreting, and reporting data; evaluation of research and educational procedure; training and guidance of research workers and graduate students. The bibliography is limited to American work.—S. W. Fernberger (Pennsylvania).

6622. Hoffmann, A. Das Filmerlebnis. (The film experience.) Z. pädag. Psychol., 1938, 39, 188-203.-Studies on methods for didactic educational movies. The film experience consists in a characteristic, artificially arranged observation complex of peculiar intensity. Movement and the time element fix the attention and determine the viewpoint. This does not permit free thought or fantasy, but only prelogical extra-intellectual absorption. The narrow field of observation adapts the film better to showing detail than a broad whole. Whether the film produces a deeper memory effect than ordinary pictorial representation is debatable. It has no specific permanent action, and it is difficult to say whether the memory is carried by the film experience or by later logical elaboration. Kines-thetically-minded persons benefit most by it, especially when they combine their own movements with the picture (tapping, etc.). The most important condition for permanent memory is the later working up in various fields of expression of the motor impressions of the film .- M. E. Morse (Baltimore).

6623. Huxtable, Z. L. Learning outcomes following self-directed and formally guided responses in controlled situations. J. exp. Educ., 1938, 6, 406-412.—"Neither of the differentiated approaches to learning, namely, the one emphasizing pupils' self-directed responses, based on the assumption that individual capacity would express itself more variably and completely in the outcomes; the other, emphasizing formal guidance of pupils' responses, based on the assumption that a more uniform restatement of authoritatively determined values would characterize the outcomes, resulted in measurable differences statistically significant in any one of twenty-four group experiments, including 804 instances of pupils' tested response."—H. W. Karn (Pittsburgh).

6624. Klinefelter, L. M. Medical occupations available to boys when they grow up. New York: Dutton, 1938. Pp. 286. \$2.00.—R. R. Willoughby (Brown).

6625. Kunde, L. A. Aesthetic judgment of seventh grade students of line in dress costume

design. Pittsb. Schs, 1938, 12, 141-154.—The author conducted a control-group experiment to discover whether there is any relationship between age or sex of students, the method of teaching, and good taste in costume design. Data seem to indicate that boys are more interested and have better taste in the judgment of costume than do girls.—(Courtesy J. educ. Res.).

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6626. Levi, L. L'educazione degli anormali psichici dal punto di vista sociale. (The education of psychologically abnormal individuals from the social point of view.) Pediat. med.-prat., 1936, 11, No. 11, 1-16.—The author emphasizes the humanitarian, economic, and social importance of the education of abnormal individuals. He indicates the subjects most readily taught and the best methods to be used.—L. Canestrelli (Rome).

6627. Lichtenstein, A. Why reading for all? Sch. & Soc., 1938, 48, 239-242.—The movies and the radio have largely obviated the need of reading for information or for entertainment. Historical films may teach history, and arithmetic need not depend on a printed page. In view of the many cases of reading disability in which much time spent in diagnosis and remedial instruction has produced only meager results, it might be better sometimes to relegate the teaching of reading to a minor place in the child's program and develop more rewarding skills.—M. Lee (Chicago).

6628. Lomont, A. Il lavoro manuale rivelatore di attitudini. (Manual labor as an indicator of aptitudes.) Orient. prof. Boll. Inform., 1937, 2, 34-35.— In a properly organized guidance program good use can be made of the observation of aptitudes during an extended work period set up as an intermediate stage between school and industry.—C. J. Herrick (Pennsylvania).

6629. Martin, L. J., & deGruchy, C. The home in a democracy. San Francisco: Harr Wagner Publ. Co., 1938. Pp. 200. \$1.75.—A course of 13 lessons designed for members of Parent-Teacher Associations, developing the thesis that the home plays the major role, and the school only a supplementary part, in creating dynamic adults who can function happily, usefully, and progressively in community life. It is particularly necessary for the home to assume responsibility in the vital matter of emotional guidance, since school training is narrowly limited to intellectual fields and erroneously teaches emotional control instead of emotional development. The ideal form of guidance is preventive work. The best vocational guidance is to give no guidance at all but plenty of opportunity for learning and for creative expression. The most neglected function of the home is training and practice in social ideals. If the principles of cooperation are stressed in the home the child will be prepared for co-operative functioning in other democratic groups, however large. Included is a chapter giving practical advice on treatment of stammering. -M. P. Montgomery (Faribault, Minn.).

6630. Marzi, A. La psicologia nella preparazione degli insegnanti. (Psychology in relation to the preparation of teachers.) Vita scol., 1938, No. 3, 1-40.—Apropos of the results obtained by J. Piaget on the tendencies and conditions of the teaching of psychology in relation to the training of future educators, the author gives a critical summary of the Italian situation with respect to this problem.—
L. Canestrelli (Rome).

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6631. McNeely, J. H. College student mortality. U. S. Off. Educ. Bull., 1937, No. 11. Pp. 112.—Students in 25 universities were studied. In the total population of over 15,000 45% left before securing a degree. The mortality was slightly greater among men; it was greater in the first year and consistently declined in the subsequent years; arts and science colleges showed the greatest mortality. Higher mortality was found in higher age groups, among those students whose homes were more distant from the university, among students living in rooming houses, and among those not taking part in extra-curricular activities. The reasons for leaving in order of decreasing importance were: failure, finances, lack of interest, sickness, discipline, needed at home, death.—C. M. Louthit (Indiana).

6632. Menefee, S. C. Distribution of effort in studying sociology. Sch. & Soc., 1938, 48, 243-245.—
In the summer of 1937 a class in sociology was divided into two sections, one of which met for one hour daily for the whole quarter and the other for two hours daily for the first term only. The average marks were slightly higher for the second group, although many members of the group complained of the pressure under which they worked. This seems to indicate that the same laws of distribution of effort do not apply here as in learning typing or rote memory material.—M. Lee (Chicago).

6633. Meriam, J. L. Learning English incidentally; a study of bilingual children. U. S. Off. Educ. Bull., 1937, No. 15. Pp. 105.—For a period of seven years the children of the La Jolla School, Placentia, Calif., who start school speaking only Mexican-Spanish, have been taught by an activities program. Spoken and written English is taught incidentally in this program. This monograph describes the problems confronting Mexican children, the nature of the program, and evidence of English acquisition without special attention. Vocabulary tabulations of teachers and children are given in detail, and the spelling grammatical, and handwriting errors of the children are analyzed. The author feels that the evidence supports the efficacy of incidental teaching of English. Bibliography.—C. M. Louttit (Indiana).

6634. Muster, D. Pregatirea pedagogica teoretica a profesorului secundar. (The theoretical pedagogical training of secondary school teachers.) Bucuresti: Publicatiunile Cercului de Studii, Seminarul Pedagogic Universitar, 1938. Pp. 104 + xii.—School marks are given in a very arbitrary way, as shown by their distributions. Similar facts on other topics may be found in the archives of schools. It is

concluded that the training of teachers is very unsatisfactory.— N. Marginean (Cluj, Rumania).

6635. Nestor, I. M. Rationalizarea examenelor universitare. (Scientific academic examinations.) J. Psihoteh., 1938, 2, 41-49.—A 73-item shortanswer test in psychology is presented.— N. Marginean (Cluj, Rumania).

6636. Oxley, H. W. CCC camp education: guidance and recreational phases. U. S. Off. Educ. Bull., 1937, No. 19. Pp. 23.—A discussion of the educational program of the CCC. On the basis of a survey of 2600 enrollees, data concerning and suggestions for vocational guidance are given.—C. M. Louttit (Indiana).

6637. Pavan, A., & Hoppock, R. An appraisal and abstract of available literature on the occupation of the detective. New York: Nat'l Occupational Conference, 1938. Pp. 8. \$0.10.—R. R. Willoughby (Brown).

6638. Pavan, A., & Hoppock, R. An appraisal and abstract of available literature on the occupation of the interior decorator. New York: Nat'l Occupational Conference, 1938. Pp. 12. \$0.10.—R. R. Willoughby (Brown).

6639. Peters, C. C. An example of replication of an experiment for increased reliability. J. educ. Res., 1938, 32, 3-9.—13 experiments were directed toward the problem of contract versus recitation the those of teaching, by the use of groups matched for intelligence; the results indicate the superiority of the contract method.—S. W. Fernberger (Pennsylvania).

6640. Ponzo, M. La scheda medica tipo nell'opera dell'orientamento professionale. (The medical report recommended for vocational guidance work.) Orient. prof. Boll. Inform., 1937, 2, 21-27.—The report of a committee studying the problems of medical participation in vocational guidance. Suggestions deal with the proper scope of medical reports, but no sample reports or forms are presented.—C. J. Herrick (Pennsylvania).

6641. Portenier, L. Aspects of socio-economic status which differentiate university students. J. appl. Psychol., 1938, 22, 261-270.—The socioeconomic status of 4 groups of students were compared. The 4 groups were: (1) Wyoming high school graduates enrolled at the University of Wyoming, (2) Wyoming high school graduates enrolled in outof-state colleges, (3) Wyoming high school graduates not continuing their education, and (4) out-of-state high school graduates enrolled at Wyoming. Socioeconomic status was determined from a personal information sheet scored like the Sims scale. Intelligence was measured by the O. S. U. test. Results show that the socio-economic scores differentiate between the college and non-college high school graduates as well as does the O. S. U. test. The report also includes comparisons by type of educational course pursued and correlations with scholarship.—S. Roslow (Psychological Corporation).

6642. Powers, F. F., & Hetzler, M. Successful methods of teaching English to bilingual children in Seattle public schools. U. S. Off. Educ. Pamph., 1937, No. 76. Pp. 17.—A brief report of methods used in special classes for bilinguals at the Pacific School, Seattle. Contains an annotated bibliography of "studies on bilingualism."—C. M. Louttit (Indiana).

6643. Price, W., & Ticen, Z. E. Index to vocations; a subject index to one thousand nine hundred and fifty careers. (2nd ed.) New York: H. W. Wilson, 1938. Pp. 122. \$1.25.—8 new books and 230 monographs have been added to the 115 books analyzed in the first edition, increasing the size of the book by 16 pages.—R. R. Willoughby (Brown).

6644. Ratliff, M. Mental hygiene—a cooperative enterprise. Kentucky Person. Bull., 1938, No. 21. Pp. 4.—Work done at the University of Kentucky in cooperation with the U. S. Public Health Service on student mental hygiene is discussed.—C. N. Cofer (Brown).

6645. Read, C. B. The prediction of scholastic success in a municipal university. Sch. & Soc., 1938, 48, 187-188.—For 3 years entering freshmen at the University of Wichita have been given a psychological, content, reading, and English examinations. High school and college averages are more closely correlated than is either with the test scores. For prediction of the second semester average the first semester average is by far the best criterion. To predict the average for the whole freshman year the high school average is the best single criterion, and this is only slightly increased by the inclusion of other criteria.—M. Lee (Chicago).

6646. Richtmeyer, C. C. Functional mathematical needs of teachers. J. exp. Educ., 1938, 6, 396-398.—
H. W. Karn (Pittsburgh).

6647. Rózsa, D. Das visuelle Erinnerungsvermögen im modernen Sprachunterricht. (The capacity for visual memory in modern language instruction.) Budapest: Buchh. d. Königl. Ung. Universitätsdr., 1938. Pp. 23. (Die Probleme d. Unterrichts. Nr 20a.)—R. R. Willoughby (Brown).

6648. Rózsa, D. Die Psychologie des Massenunterrichts mit besonderer Rücksicht auf den Sprachunterrichts. (The psychology of group instruction, with special reference to language instruction.) Budapest: Buchh. d. Königl. Ung. Universitätsdr., 1938. Pp. 27. (Die Probleme d. Unterrichts. Nr 19a.)—R. R. Willoughby (Brown).

6649. Sandiford, P. The foundations of educational psychology. New York, London, Toronto: Longmans, Green, 1938. Pp. xv + 464. \$3.25.— This book, announced as the first of a series surveying the foundations of educational psychology, defines its subject as that part of the modern biosocial science of psychology which is "concerned with learning in every aspect and extension." The volume includes six long chapters on the following topics, considered more or less in their relation to the learning and educability of the human individual: (1) heredity

and environment; (2) history and present status of the objective study of human individual differences; (3) physiological foundations of behavior; (4) "non-variable or unlearned behavior" (tropisms, reflexes, instincts, and emotions); (5) nature and measurement of intelligence; (6) nature and measurement of personality. A fairly extended list of important references ends each chapter.—C. K. Trueblood (Harvard).

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6650. Săndulescu, M. Raportul dintre testele de inteligenta și notele obtinute la bacalaureat. (The relation between intelligence tests and the marks obtained at the general examination for the bachelor's degree.) J. Psihoteh., 1938, 2, 72-74.—The correlation between intelligence scores and school marks is rather low due to the unreliability of the latter. Standardized achievement tests should be used.—N. Marginean (Cluj, Rumania).

6651. Scanga, G. Aspetti attuali della questione dell'orientamento professionale. (Current aspects of vocational guidance.) Orient. prof. Boll. Inform., 1937, 2, 7-10.—"Adequate cultural and psychological preparation of all concerned in guidance work... is the most difficult and crucial problem in vocational guidance."—C. J. Herrick (Pennsylvania).

6652. Schane, E. B. Characteristic errors in common fractions at different levels of intelligence. *Pittsb. Schs.*, 1938, 12, 155-168.—On the basis of data gathered from an analysis of errors in pupils' work the author concludes that the chief difficulty for pupils in the subnormal group was the lack of knowledge as to how to begin the solutions.—(Courtesy *J. educ. Res.*).

6653. Simmons, M. P. Changing conceptions of dominant problems relating to major topics in general science textbooks. J. exp. Educ., 1938, 6, 399-405.—H. W. Karn (Pittsburgh).

6654. Spiegler, S., Graham, A., & Hoppock, R. An appraisal and abstract of available literature on the occupation of the industrial chemist. New York: Nat'l Occupational Conference, 1938. Pp. 11. \$0.10.—R. R. Willoughby (Brown).

6655. Spiegler, S., & Hoppock, R. An appraisal and abstract of available literature on the occupation of the baker. New York: Nat'l Occupational Conference, 1938. Pp. 10. \$0.10.—R. R. Willoughby (Brown).

6656. Spiegler, S., Roos, M., & Hoppock, R. An appraisal and abstract of available literature on the occupation of the office machine operator. New York: Nat'l Occupational Conference, 1938. Pp. 12. \$0.10.—R. R. Willoughby (Brown).

6657. Strong, E. K. Vocational interest blank for men. Stanford University, Calif.: Stanford Univ. Press, 1938. \$6.00 per 100 copies.—"Men engaged in a particular occupation have been found to have a characteristic set of likes and dislikes which differentiate them from men following other professions. The Vocational Interest Test is a device by which such patterns of interests may be determined. By

means of it, also, it is possible to ascertain the pattern of interests with which a given individual's interests most nearly coincide, and hence the occupation for which he is best fitted so far at least as his interests are concerned." Scoring scales are available for measuring interest in 35 occupations and also for certain other non-occupational interests. The average coefficient of reliability (odd-even) of 36 revised scales for men is .877.—M. Keller (Brown).

6658. Sturtevant, S. M., & Reddick, V. S. Recent books for deans, counselors, and other personnel workers; an annotated bibliography. New York: Teachers College, Columbia University, 1938. Pp. 12. \$0.20.—R. R. Willoughby (Brown).

6659. Tassoni, F. La psicologia nella ricerca delle attitudini professionali. (Psychology in relation to the study of professional aptitudes.) Abruzzo med., 1937, No. 3, 122-141.—L. Canestrelli (Rome).

6660. Traxler, A. E. The relationship between the length and the reliability of a test of rate of reading. J. educ. Res., 1938, 32, 1-2.—Two test forms, each consisting of 177 lines, were administered to 78 pupils of the junior class of the University of Chicago High School. Correlations between the amount read from the two forms increase with the time interval of reading; the 400-second interval thus gave the highest correlation and also came closest to the prediction by the Spearman-Brown formula.—S. W. Fernberger (Pennsylvania).

6661. Tussing, L. What students want from the elementary course in psychology. J. appl. Psychol., 1938, 22, 282-287.—A list of topics in psychology was presented to beginning students in the general psychology course at Beloit College, with instructions to check the items on which more information was desired. From the results it seems that psychology as it is now taught avoids many topics desired by the students.—S. Roslow (Psychological Corporation).

6662. Unger, H. Graphologische Berufsberatung. (Graphological vocational guidance.) Industr. Psychotech., 1938, 15, 78-84.—It is claimed that vocational guidance can be greatly aided by the method outlined for use with those who write German script. —J. C. G. Seidl (Manhattan College).

6663. U. S. Office of Education. List of publications of the Office of Education, 1910-1936. U. S. Off. Educ. Bull., 1937, No. 22. Pp. 158.—A complete list, with exhaustive author and subject indexes.—C. M. Louttit (Indiana).

6664. Valentine, T. 27. Jahresbericht des Instituts für Jugendkunde in Bremen. (27th annual report of the Bremen Institute for Youth Study.) Z. pädag. Psychol., 1938, 39, 222-224.—The work of the Institute was divided as previously into service for promotion from elementary to secondary schools, school and vocational aptitude tests, and studies in the psychology of population. The selection of pupils for secondary schools is governed by the principles enunciated by Hitler in Mein Kampf. A preliminary recommendation is made by the principal

of the elementary school; a comprehensive physical, characterological, mental and folk examination is held annually by the Institute; and a third judgment is passed by the secondary school at the end of the first year. The section on political biology has for some time been studying the psychological causes of the decline in the birth rate.—M. E. Morse (Baltimore).

6665. Williams, R. L. Academic success of individual college students throughout their total period of residence. Sch. & Soc., 1938, 48, 217-220. -Average grades in different semesters at the University of Michigan were correlated. interval between the semesters varies inversely with the correlation. The semester which correlates highest with the total college average is the third (.774). Percentile ranks on averages earned according to semesters in residence increase for the lower half of the class and decrease for the upper half. Students do better in general than in special subjects. 87% of freshmen with an average of less than C in the first semester made an average of more than C in the last semester. Transfer students react very differently on the above points, possibly because of a different administrative policy regarding them .-M. Lee (Chicago).

6666. Witmer, M. H., & Proffitt, M. M. Guidance bibliography. U. S. Off. Educ. Bull., 1937, No. 37. Pp. 71.—An annotated bibliography of 442 references published during 1936 on guidance, including elementary and secondary schools, colleges, and out-of-school youth. Does not include material on specific occupations.—C. M. Louttit (Indiana).

[See also abstracts 6162, 6237, 6423, 6432, 6454, 6475, 6491, 6494, 6505, 6533, 6536, 6538, 6539, 6541, 6595, 6673, 6678, 6684, 6685, 6688, 6692.]

MENTAL TESTS

alertness measures. J. appl. Psychol., 1938, 22, 307-310.—50 persons whose intelligence was originally tested with Bureau Test VI were retested after a 10-year period. They had been employed in the same company during this period. There was a correlation of .89 between the 2 tests. The employees were classified into 3 job levels according to the job held at the end of the 10 years of service. These groups were simple clerical work, complicated clerical work and decision-making jobs. The correlations of the intelligence tests with this variable were .77 for Bureau Test VI and .83 after 10 years of service.—S. Roslow (Psychological Corporation).

6668. Guilford, J. P. A new revision of the Army Alpha examination and a weighted scoring for three primary factors. J. appl. Psychol., 1938, 22, 239-246.—4 forms of the Army Alpha examination administered to students at the University of Nebraska were item-analyzed to furnish items for the revision. A factor analysis was also made, which revealed 3 factors, V (verbal), N (numerical), and R (relations). Each of the 8 tests in the examination

contributed to only one of these factors, and weights are given so that the 3 factor scores may be obtained as well as the total. The revision is supposed to be equivalent to the original Alpha, so that the current norms may be used. Additional norms based on Nebraska college students are available for the 3 factors.—S. Roslow (Psychological Corporation).

6669. Higginson, G. D. An objective test of imagination. Ann Arbor: Edwards Bros., 1938.—
In this test imagination is measured by the number of different objects, such as geometrical patterns and word combinations, which an individual produces under specific conditions. Testing time about 50 minutes.—M. Keller (Brown).

6670. Macvaugh, G. S. Regression formula to predict educational ages from revised Alpha scores. J. appl. Psychol., 1938, 22, 275–281.—Revised Alpha examination, form 5, and the New Stanford achievement test, form W, had been administered to 2000 adult male inmates of the U. S. Penitentiary at Fort Leavenworth. The correlation between the 2 tests was .87. The regression equation predicting educational age from Alpha score was computed and a conversion table constructed. The average predicted educational age was overestimated by less than half a month.—S. Roslow (Psychological Corporation).

6671. Strang, R. Non-verbal intelligence tests. J. consult. Psychol., 1938, 2, 122-123 .- "This type of test is becoming increasingly important in the diagnosis of reading deficiencies." The Porteus maze test is reported to be second in frequency of use in clinics. A new manual for the short scale of the Pintner-Paterson performance tests is now available. An analysis of tests given in a London child guidance clinic showed that the mare and foal form board satisfactorily supplements the Binet. Tests recommended for the elementary school are the Arthur performance scale, Greene's Michigannon-verbal test, Cornell-Cox performance and Pintner non-language test. For adults and older students there are available the Leiter international performance scale and the Likert-Quasha revised Minnesota paper form board test, series AA and BB. The revised Beta examination is especially suitable for adults, although it can be successfully used with children down to the third grade.-P. S. de Q. Cabot (Simmons).

[See also abstract 6571.]

CHILDHOOD AND ADOLESCENCE

6672. Aldrich, C. A., & Aldrich, M. M. Babies are human beings; an interpretation of growth. New York: Macmillan, 1938. Pp. 140. \$1.75.—R. R. Willoughby (Brown).

6673. Baumgarten, F., & others. Der Jugendliche und das Berufsleben. (The youth and his vocation.) Berne: Burgdorf, 1937. Pp. 128.— Most apprentices demand not only activity but also accomplishment. They have great self-confidence and believe that they can overcome unfavorable economic conditions by superior application. Environmental influences produce a materialistic attitude later. Children of the poor make up for lack of worldly goods by greater intimacy of family life, even in respect to their work. The immediate plans of 200 apprentices were: to remain in the business, 33%: to get into a modern business in Germany, 44%, and abroad, 54%; expansion in a related calling, 18%; advancement in their present work, 95%; owning a business, 32%. The reports showed that during apprenticeship more time should be devoted to individual teaching and that youth's urge toward its own fulfilment should be encouraged.—P. L. Krieger (Leipzig).

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6674. Benedict, R. Continuities and discontinuities in cultural conditioning. Psychiatry, 1938, 2, 161-167.—The child, required to appear irresponsible, submissive and asexual, is expected to become a responsible, dominant, and sexually potent adult.—M. Grotjahn (Chicago Institute for Psychoanalysis).

6675. Boettiger, E. F. Children's play, indoors and out. New York: Dutton, 1938. Pp. 189. \$2.00.

—R. R. Willoughby (Brown).

6676. Bruhn, K. Die freien Interessen der Kinder und Jugendlichen. (The free interests of children and adolescents.) Helsingfors: Akad. Buchh.; Leipzig: Harrassowitz, 1937. Pp. 41. Fmk 18.—R. R. Willoughby (Brown).

6677. Bühler, C. Praktische Kinderpsychologie. (Practical child psychology.) Vienna, Leipzig: O. Lorenz, 1938. Pp. 253. M 4.—Written especially for parents and vocational teachers and based on the author's experience, this book takes up the development of the preschool and school child, with emphasis on educational problems. The studies were made by exact methods. Bibliography of recent literature, tables, curves, etc.—M. E. Morse (Baltimore).

6678. Christoffel, H. Zur Erziehungsproblematik beim Einnüssen. (The educational problem in bed-wetting.) Gesundk. u. Wohlf., 1937, 17, 398-412.—Enuresis occurs, not in deep sleep, but in partial or complete wakefulness. It is not due to a weak bladder, but is a character problem and can be influenced only by treatment of the entire personality.—P. L. Krieger (Leipzig).

6679. Geyer, H. Schlafen und Wachen bei Zwillingen. (Sleeping and waking in twins.) Forsch. Fortschr. dtsch. Wiss., 1937, 13, 209; 291.—Geyer observed the sleep behavior of 26 pairs of twins (girls between 6 and 14 years, half of them identical twins). Tonus, color of the cheeks, and position assumed showed marked similarity in both members of a pair, as well as the occurrence of the cortical type (deep, dreamless, with automatic, rhythmical, often swaying movements) and the brain-stem type (motionless, with dreams and talking in sleep). Somnambulism, enuresis, grinding of the teeth, the type of awakening, and other basic reactions were also alike in both members.—M. E. Morse (Baltimore).

therapy. Amer. J. Orthopsychiat., 1938, 8, 466-478.

To evaluate pragmatically the clinical utility of play therapy, 40 problem children who remained unimproved after having been subjected to "the classical techniques of child guidance" were treated by "play" procedures. The results are examined as to degree of improvement or unimprovement. The findings are sufficiently favorable to warrant the conclusion that "play therapy is a significant new factor in treatment." However, play therapy must not be conceived of as an isolated therapeutic entity, but rather as an integral part of the broad viewpoint generally employed in child guidance clinics.—

S. W. Bijou (Delaware State Hospital).

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6681. Gitelson, M., Ross, H., Homberger, E., Allen, F., Blanchard, P., Lippman, H. S., Gerard, M., & Lowrey, L. G. Section on "play therapy," 1938. Amer. J. Orthopsychiat., 1938, 8, 499-524.—The members of the panel devoted their discussions to a critical evaluation of "play therapy." The major topics included are: definition of terms, aims, technical difficulties involved, fitness for the average child guidance clinic's organization, suitability for use in children's agencies, and qualifications of the play therapist.—S. W. Bijou (Delaware State Hospital).

6682. Hetzer, H. Kindheit und Armut. (Childhood and poverty.) (2nd ed.) Leipzig: Hirzel, 1937. Pp. 182. RM. 7.—Neglect of a child is the result not only of poverty but also of incapacity of those responsible for him. It retards his development, reduces his capacity, and especially influences his attitude toward life. Hetzer discussed the damage produced by neglect on the basis of her observations and experiments on well-cared-for children from favorable economic circumstances and neglected children from poverty-stricken families, beginning with the retardation evident in the second group even during the first year, and extending to the injuries of the adolescent. Speech development, play, relationships to parents, siblings and comrades, intellectual development, school records, development of the will, self-control, and vocational orientation are scrutinized. Special attention is devoted to the children's own expressions on their experiences of poverty and its effect on an affirmative life attitude. The fact is emphasized that there are resources in the child's situation, and especially in the mother, which can be utilized to counteract external want, and that the remedy for necessitous conditions lies not only in material help but also in social work directed by psychological viewpoints.—H. Hetzer (Berlin).

6683. Imada, M. [Preference in the appreciation and use of colors and color combinations by young children.] Jap. J. Psychol., 1938, 13, 133-146.—In the first and the second tests the subjects used were all kindergarten children in the city of Osaka, consisting of four groups each having 100 children (5-year-old boys, 5-year-old girls, 6-year-old boys, 6-year-old girls); about 300 kindergarten boys and girls in the suburbs of Kobe, 5 and 6 years of age,

took part in the third experiment. In the first test, where red was combined with light red, orange, yellow, green, blue and violet, or blue was combined with red, orange, yellow, green, light blue and violet, each red or blue series was presented separately to individual subjects by the method of paired comparisons. It was found that though the differentiation of preference has not yet developed with young children of these ages, the choice is not haphazard; in red series, red-blue or red-yellow always occupies the first or the second position, but the choice is not so definite in blue series. There was little sex or age difference, but a great difference was seen when the children were compared with college students or older school children. In the second test children supplied with eight color crayons were required to color an outline drawing. Red and yellow here occupied the first and second positions and black and brown were last. In the third test the same group of children were asked to draw anything they liked under two different conditions, with a black crayon only and with eight color crayons. The average number of objects drawn is always greater when the child is allowed to use colors. More human figures, animals, geographical conceptions, plants, the sun and the moon are drawn when colors are freely used, but vehicles, buildings and concrete articles greatly increase with black only.-R. Kuroda

-6684. Kesselring, M. Der Einfluss spaniendeutscher Flüchtlingskinder auf Schulleben und Unterricht. (The influence of German child refugees from Spain on school life and teaching.) Z. pādag. Psychol., 1938, 39, 203-214.—A report on 83 German or half-German children removed from cities in Loyalist Spain and put in schools in rural Bavaria. They adapted themselves quickly, were well prepared in their school work, and were enthusiastically welcomed by the native children. The latter were particularly interested in the foreign geography and history which they learned from the newcomers, who had a wider background. Their presence was utilized by the teachers to emphasize the horrors of Communism and the movement for Germany in foreign lands, especially in regard to the Sudeten problem.-M. E. Morse (Baltimore).

6685. Kirkendall, L. A. The influence of certain incentives in the motivation of children. Elem. Sch. J., 1938, 38, 417-424.—Through the use of a questionnaire given to 284 pupils in grades IV, V, and VI in the New Britain, Conn., public schools, the author derives a list of incentives and their relative motivating influence.—(Courtesy J. educ. Res.).

6686. Michaels, J. J. The incidence of enuresis and age of cessation in one hundred delinquents and one hundred sibling controls. Amer. J. Orthopsychiat., 1938, 8, 460–465.—"The higher incidence of enuresis and its longer persistence, as revealed in the present study and in other investigations, strengthens the conception of the intimate relationship between enuresis and delinquency—that they

are both expressions of some common fundamental disorder in the personality."—S. W. Bijou (Delaware State Hospital).

. 6687. Mowrer, O. H., & Mowrer, W. M. Enuresis—a method for its study and treatment. Amer. J. Orthopsychiat., 1938, 8, 436–459.—In the opinion of the writers, nocturnal enuresis is primarily due to faulty habit training. 30 enuretic children were successfully conditioned to cease the practice by means of an automatic mechanical arrangement. Each case was observed for "symptom substitutions," but all personality changes were of the favorable type. "It is concluded that the widespread view that enuresis is always a 'symptom' and must be dealt with directly represents the misapplication of a concept illicitly borrowed from adult medicine and psychopathology."—S. W. Bijou (Delaware State Hospital).

6688. O'Connor, Z. C. The runaway boy in the correctional school. Teach. Coll. Contrib. Educ., 1938, No. 742. Pp. viii + 78.—From 400 problem children (ages 6 to 16) at the Children's Village, Dobbs Ferry, in 1929, 119 runaways from the village were studied in comparison with 125 boys who had not run away during a year of residence. (41 of them subsequently ran away, leaving a base control group of 84.) The boys of the runaway group were interviewed immediately upon their return. Five years later 20 runaways who had been at the institution at least 6 months were matched with the same number of controls and were interviewed on the basis of a questionnaire based on the earlier findings. The success or failure of the original groups was investigated after a six-year period. The runaways were older, had subsequent poorer adjustment, had been conditioned to running away before commitment, were less flexible, had fewer interests for leisure time before coming to the institution, and found fewer recreational outlets after commitment. Institutional discipline is considered and the implications of the study for institutional treatment dis-The bibliography lists 16 titles.-J. M. Stalnaker (Princeton).

6689. Partridge, E. D. Social psychology of adolescence. New York: Prentice-Hall, 1938. Pp. xv + 361. \$2.75.-In order to understand human behavior, one must take into account (1) the nature of the individual, and (2) the nature of such relationships as exist between, and bear upon the adjustment of, organism and environment. Much behavior is determined by the kinds of adaptation that are "To those possible in the social environment. working with young people, this book is intended to be an authentic survey of the ever-expanding fields of sociology and psychology, especially as they relate to young people in modern society. Contents: young people of America; approaches to adolescent behavior; nature of the individual; social implications of individual differences; nature of the informal group; influence of adolescent leaders; how the group influences the individual; relationships between the sexes; young people in the family; the adolescent and leisure time; the adolescent and the community; the adolescent and the educational process; social psychology of delinquency; the social approach to behavior difficulties.—D. G. Ryans (William Woods College.)

6690. Peatman, J. G., & Higgons, R. A. Growth norms from birth to the age of five years. Amer. J. Dis. Child., 1938, 55, 1233-1247.—Norms of growth were derived from a study of 5149 heightweight pairs of measurements of 1112 boys and girls from 1 to 60 months of age, who live in a suburban area of New York. A significant increase of both height and weight, after the age of three months, of this group's norms over norms for other groups is attributed to a relatively optimal degree of pediatric care and home supervision.—W. J. Brogden (Johns Hopkins).

6691. Reymert, M. L., & Kohn, H. A. Suggestive data concerning the etiology of behavior problems. Trans. Ill. St. Acad. Sci., 1937, 30, 281–283.— This is a continuation of two previous studies made at the Mooseheart Laboratory to determine environmental and subjective differences between groups of problem and non-problem children, matched in age and sex. 32 boys were used in this present study. The results indicate that father's occupation, cause of father's death, number of siblings, religious belief, and order of birth do not distinguish between the two groups. Age on admission, intelligence, status of mother, parents' nationality, number of changes in hall placement, and placement in school system do distinguish between the two groups.—F. Witmer (Mooseheart Laboratory for Child Research).

6692. Richards, E. L. Relationship of declining intelligence quotients to maladjustments of school children. Arch. Neurol. Psychiat., Chicago, 1937, 37, 817-838.—Case studies are presented of 20 children followed for periods ranging from 4 to 15 years. Recommendations for a less rigid educational procedure are made.—D. G. Marquis (Yale).

6693. Seymour, A. H., & Whitaker, J. E. F. An experiment on nutrition. Occup. Psychol., 1938, 12, 215-223.—25 backward children, average age 6.6 years, were given a balanced breakfast for eight weeks, and were compared with a control group. The selected group showed a finger temperature 1° C. higher than the control group, averaged 10% better in a daily three-minute test crossing out O's, and averaged 10% more improvement in arithmetic, poetry, and English. After the experiment was discontinued the temperature of the experimental group was the same as that of the control group, and the mental "output of the experimental group fell so that it was only by a small amount greater than that of the control group."—H. Moore (Mt. Holyoke).

[See also abstracts 6253, 6351, 6385, 6435, 6436, 6449, 6451, 6457, 6463, 6492, 6533, 6541, 6563, 6594, 6629, 6664.]



Abash Abash

Afana Agar, Agdur Agerb Ainau Ainsw Aitker Aizaw Ajo, A Ajuria Akhm

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PSYCHOLOGICAL ABSTRACTS

Vol. XII, No. 13

DECEMBER, 1938

AUTHOR INDEX

Abashev. A. L., 4831
Abashev-Konstantinovsky, A. L., 4064
Abbe, M., 3339, 3340, 3341
Abbie, A. A., 6192
Abbott, A., 5539
Abderbalden, E., 5623
Abe, M., 4443
Abe, N., 4535
Abel, R. M., 1776
Abel, T. M., 1504, 3984
Abély, X., 2429
Abraham, K., 1342
Abrams, H., 4320
Abrams, R. H., 4486
Abramson, J., 4065
Ach, N., 737
Acheson, G. H., 2263, 2266
Achille-Delmas, F., 140
Achilles, P. S., 3685
Ackerman, N. W., 2155, 2515, 6117
Adair, C. R., 6251
Adam, G. F., 1709
Adam, W., 3675
Adams, E. W., 3522
Adams, F. J., 4321
Adams, H. F., 738
Adams, L., 4615
Adams, L., 4615
Adams, L., 4615
Adams, D. C., 2194
Adland, C., 1982
Adler, A., 812
Adler, M. J., 1
Adler, P., 6295
Adrian, E. D., 1001, 1738, 1739, 2769, 3857, 4505
Afanasiev, D. V., 4066, 4743
Agar, W. E., 3928, 3929
Agduhr, E., 5226, 6296
Agerberg, J., 6375
Ainaud, E., 5249
Aitken, A. C., 1002
Aisawa, M., 4847
Ajo, A., 4536
Ajuriaguerra, J. de, 2272, 6229
Akhmetell, M., 1184, 1185, 1848, 4546 Abashev, A. L., 4831 Abashev-Konstantinovsky, A. L., Aiken, A. C., 1002
Aizawa, M., 4847
Ajo, A., 4536
Ajuriaguerra, J. de, 2272, 6229
Akhmeteli, M., 1184, 1185, 1848,
4546
Akishige, Y., 3342
Alabaster, E. B., 3343
Alam, M., 3985
Alcora, D. E., 370
Aldrich, C. A., 6672
Aldrich, M. M., 6672
Aldrich, M. M., 6672
Aldrich, M. G., 4537
Alexander, F., 1, 2400, 4043, 4044,
4184
Alexander, L., 5676
Alexander, L., 5676
Alexander, L., 5676
Alexander, W. P., 550, 5806
Alexander, W. P., 550, 5806
Alexeleff, W. A., 2343
Alford, L. B., 2770
Alfvén, J., 6377
Alibrandi, A., 1229
Alinaky, S. D., 4940
Allard, H. A., 3986
Allee, W. C., 6484
Allen, F., 4538, 6681
Allen, F., 4538, 6681
Allen, F. H., 3757
Allen, G. M., 1174
Allen, G. M., 1174
Allen, G. M., 1174
Allen, M. K., 2864

Allen, R. D., 498
Allen, W. F., 5677
Allen, W. M., 2396
Allera, R., 3709
Alleach, G. J. v., 3253
Allgaier, E., 3133, 4955
Allport, F. H., 1505, 1506
Allport, G. W., 1964, 3444, 4444
Allsopp, A. H., 3157
Almqvist, R., 1900
Alper, B. S., 908
Alpera, D. E., 4506
Alpera, B. J., 5905
Alpert, S., 1108
Alquier, L., 259
Alster, B., 4838
Alström, C. H., 260
Alt, M., 5982
Altaras, I. M., 4744
Altenburger, H., 5227
Altenkämper, E., 5906
Altman, C. H., 1376
Alvarez, O., 3523
Alvarez, García, V., 2053
Alvarez, García, V., 2053
Alvaredes, F., 1267, 2195, 5081, 5895
Amatruda, C. S., 3211
Amelotti, E., 2220
Ames, L. B., 558
Amoss, H., 3710
Amossov, M. M., 4067
Amreich, J., 4068
Anastasi, A., 4445
Anderson, C. M., 261
Anderson, C. M., 261
Anderson, C. M., 264
Anderson, D., 5545
Anderson, D., 5545
Anderson, D., 5545
Anderson, H. D., 457, 6497
Anderson, H. C., 5826
Anderson, H. C., 5826
Anderson, H. C., 5826
Anderson, J. E., 6144
Anderson, J. E., 6144
Anderson, J. E., 6144
Anderson, J. E., 6144
Anderson, J. M., 2517
Anderson, H. C., 5826
Anderson, J. E., 6144
Anderson, J. E., 6144
Anderson, J. E., 6144
Anderson, J. S., 2517
Anderson, H. C., 5826
Anderson, J. E., 6144
Anderson, J. E., 6144
Anderson, J. E., 6144
Anderson, J. E., 6144
Anderson, J. S., 2517
Anderson, J. S., 2517
Anderson, J. J. J., 2516
Anderson, J. J., 2517
Anderson, J., 2517
Anderson, J. J., 2517
Anderson, J. J., 2517
Anderson, J. J., 2517
Anderson, J., 2517
Anderson, J., 2517
Anderson, J. J., 2517
Anderson, J., 2517
Ander

Aplin, I. M. W., 3525 Appel, K. E., 4403, 5130 Appelt, A., 3526 Aptekar, H., 4194 Arama, O., 3556 Arcan, T., 4978 Arden, F., 2888 Argelander, A., 4540 Arkin, H., 2697 Arlitt, A. H., 3758, 5031 Armonier, G., 1377 Armstrong, C. P., 3119 Arnell, N., 1740 Arnold, K., 3686 Arnold, T. W., 371 Arnold, W., 5082 Arnulf, A., 5728 Arnulf, A., 5728 Arrington, R. E., 2157 Arsenian, S., 2030, 2147 Arnuli, A., 5728
Arrington, R. E., 2157
Arrenian, S., 2030, 2147
Arsenian, S., 2030
Arthur, G., 960
Arthur, G., 960
Arthur, E., 3563
Asch, S. E., 335, 4849
Asher, E., 2669
Asher, E., 2699
Asher, L., 2352, 2889, 5119, 5830
Ashkenas, D. M., 2238
Ashley-Montagu, M. F., 3613
Ashman, R., 1269
Asmussen, E., 6297
Aspelin, G., 3254
Assuncao, Z., 5228
Astor, F., 2138
Atkins, W. R. G., 3858
Atwell, C. R., 961, 2148, 4084
Atzler, E., 5831
Aubrun, W., 262, 2948
Auersperg, A., 678, 2784
Auster, U., 57
Autrum, H. J., 3345
Averli, L. A., 5626
Avery, C. E., 6083
Axente, S., 6426
Axmacher, F., 6194
Ayala, M., 2785
Asoy, A., 3346
Baar, E., 561 Asoy, A., 3346

Baar, E., 561
Bab, W., 2786
Babcock, H., 4390
Baber, R., 2519
Babtchine, I. S., 3301
Bachelard, M. G., 5627
Bachmann, G., 760, 1270, 2353, 2369
Backmann, J., 2520
Backhauu, H., 2273
Backlin, E., 263
Backman, P., 628
Bacq, Z. M., 3302, 3303, 3304, 3824
Baer, J. A., 1251
Baedorf, K., 4399
Baganz-Lehmann, M., 6487
Bagchi, B. K., 1271
Bagh, K. v., 5729, 6230
Bahle, J., 876, 877, 3047
Bahnsen, P., 5229
Bahr, G. v., 2787
Bahuault, E., 1751

Baker, B. W., 1378, 4071, 4746
Baker, C., 5166
Baker, E., 4873
Baker, E. M., 2670
Baker, H. J., 1654, 3158
Baker, L. E., 1180
Baker, W. J., 1507
Bakur, H. J., 1654, 3158
Baker, L. E., 1180
Baker, W. J., 1507
Bakuradze, A., 1050, 1051, 1052
Bakwin, H., 4400
Baláz, K. v., 5983
Balázs, J. v., 4218
Baldock, E. C., 6549
Baldrian, K., 3859, 4323
Balduzzi, O., 1379
Balint, M., 1343, 1344, 5268
Ball, J., 196, 1272
Ballard, P. B., 3711, 5542
Baloache, M., 6606
Baleer, B. H., 2949
Balvet, P., 814
Bam, L., 4616
Bamarck, J. E., 3445
Bandyopadhyay, K., 4219
Banerji, M. N., 2698
Bange, F., 5297
Banssoni, F., 6601
Banister, H., 2066
Bank Manager, 6060
Bannwarth, A., 3527, 4072
Banu, G., 2431
Banus, M. G., 740
Barach, A. L., 3614
Barag, G., 1345
Barday, R., 4541
Barber, V., 3334
Barbu, Z., 2522, 2671, 5032, 6465
Barcroft, J., 2771, 2772, 4668, 5832, 5873
Bard, P., 659
Bardecki, A., 4448, 6145
Barelare, B., Jr., 237
Bargeton, D., 2239
Barker, E. M., 3930
Barker, J. L., 1985
Barker, R., 1346
Barkadale, E. C., 4220
Barmack, J. E., 197, 741
Barres, R. M., 4669
Barnes, T. C., 4542
Barnhart, E. N., 5409, 6488
Baroni, E., 1118
Barr, M., 3287
Barrett, J. L., 18660
Barrett, J., 18660
Barrett, W. G., 1347
Barrett, E. R., 5543
Barry, H., 3287
Barrett, E. R., 5543
Barry, H., 171, 1470, 1508
Barry, H., 1815, 2432
Baruch, D. W., 3200
Barwell, J. S., 1509
Basedow, I., 5298
Basler, A., 6299

Bassett, D. M., 3528
Bast, T. H., 683
Battista, L., 2619
Baudouin, A., 1777, 2788
Bauer, H. C., 4339
Baumann, E. D., 6489
Baumann, E. D., 6489
Baumann, H. H., 3529
Baumgarten, F., 488, 855, 2067, 2494, 2620, 5628, 6673
Baxter, E. D., 967
Bayer, H., 88
Bayley, N., 562, 3201, 5591
Bayliss, L. E., 1106
Beach, D. M., 4850
Beach, D. M., 4850
Beach, F. A., Jr., 1046
Beaglebole, E., 3617, 4851
Beam, S. F., 3988
Bean, C. H., 1107, 3862
Bean, J. W., 1274
Beaton, T., 2433
Beaumont, G. de, 3159
Beaumont, H., 2093, 3160
Beburlshvili, N., 1182, 1275
Becht, H. M., 4324
Beck, L. F., 2242, 3255
Becker, F., 919, 6576
Becker, O., 4
Becker, P. E., 5984
Beder, V. L., 4747
Bedford, T., 5499
Beebe-Center, J. G., 753, 1510
Beecher, H. K., 1741, 5678
Beer, E. S., 2950
Beers, H. W., 2523, 5985
Beets, F., 3347
Béhague, P., 679
Behanan, K. T., 1895
Behn, S., 5230
Behrendt, P., 3530
Behrendt, P., 3530
Beinhoff, W., 1601
Beitel, R. J., 4852
Békésy, G., v., 3348, 3863
Belby, J., 5477
Belfila, —, 3007
Belgov, I. M., 4073
Bell, G. H., 6300
Benlakt, L. J., 623
Belova, T., 4543, 4544
Bem, A. L., 4045
Benaglia, A. E., 8336
Benart, L., 4980, 4981
Bender, M. B., 1103, 1276, 5231, 5833
Benedek, T., 2398, 5270
Benedek, T., 2398, 5270
Benedek, T., 2398, 5270
Bennett, R., 6674
Benea, M. F., 459
Bennett, A. C., 5, 591
Bennett, A. C., 5, 591
Bennett, M. B., 1103, 1276, 5231, 5833
Benedek, T., 2398, 5270
Bennett, M., 847, 5379
Bennett, M., 847, 5379
Bennett, M., 847, 5379
Bennett, M., 847, 5379
Bennett, M., 8712
Bennoit, E., 569
Bennett, M., E., 361
Benter, M., B., 1103, 1276, 5231, 5831
Bernety, J., 3446
Bennett, M., 8, 3712
Bennott, G., 664
Bennett, M., 8, 3712
Bennott, M., 7111, 2197, 2434, 3256, 3772, 3773
Benton, W. B., 6491
Benger, H., 806
Bennett, M., E., 3712
Bennott, G., 60, 730, 6231
Berger, G., 4852
Berger, G., 5397
Bergerenisson, S., 4221
Berguer, G., 5397

Beritov, I., 1004, 1110, 1048, 1049, 1050, 1051, 1052, 1053, 1183, 1184, 1185, 1277, 1278, 1778 1848, 4507, 4546 1848, 4507, 4546
Berk, L., 3989
Berkeley-Hill, O., 373, 1649
Berken, J., 742
Berkson, J., 742
Berkson, J., 742
Berle, B. B., 4868
Berlucchi, C., 1380
Berman, L., 5636
Bernard, W. S., 5398
Bernays, E. L., 2524
Bernfeld, S., 5273
Bernhardt, K. S., 714, 715, 2672
Bernovits, M., 6232
Bernstein, F., 1005
Bernstein, N. A., 3990
Bernstein, N. A., 3990
Bernstein, N. 2245
Bernstein, N. 204
Berry, M., 5245
Bernstein, S., 2245
Bernstein, S., 2245
Bernstein, S., 2245
Bernstein, N. 204
Berry, M., F., 374, 4222, 4853
Berstein, M., 2094
Berry, M., F., 374, 4222, 4853
Berstein, M., 2094
Berry, M., F., 374, 4222, 4853
Berstein, M., 2084
Berry, M., J. A., 5121
Berry, W., 4453
Berstein, M., 2086
Berth, M., 1866
Beth, K., 1986, 5399
Bethe, A., 108
Betzendahl, W., 264, 6379
Beutler, R., 2355
Bewan-Brown, C. M., 3489
Beyer, H., 423
Beyerholm, O., 817
Beyle, H. C., 2056
Beynon, E. D., 4854
Beankk, M., 1864
Bickel, W., 5987
Bieber, I., 5835
Biegel, R. A., 3048
Bickel, W., 5987
Bieber, I., 5835
Biegel, R. A., 3048
Bienstock, S., 501, 502
Bierens de Haan, J. A., 1865, 3350, 3931, 4670, 5203
Bienheuvet, S., 5731
Bieth, P., 1615
Bills, M. A., 6061
Bills, M. R., 3553
Binger, C., 1280 Berk, L., 3989 Berkeley-Hill, O., 373, 1649 Binder, M. B., 4113
Bineau, —, 300, 775
Bineau, R., 3553
Binger, C., 1280
Bingham, W. V., 4982, 5544
Binswanger, L., 6355
Birbrair, L. B., 4547
Bird, C., 4976
Birkhoff, G. D., 3618
Birnbaum, F., 593
Birtwistle, J. A., 1866
Birzele, K., 6466
Bischoff, H., 4402
Bishop, G. H., 2241, 2264, 6195, 6204
Bishop, H., 6602 6204 Bishop, H., 6602 Bissonnette, T. H., 3991, 5151 Bivin, G. D., 1381 Bise, R., 265 Bivin, G. D., 1381
Bize, R., 265
Bjórnberg, J., 818
Blachowski, S., 3759, 5083
Black, J. W., 1987
Black, J. W., 1987
Black, H. H., 6062
Black, M., 7
Blackburn, R. H., 1111
Blair, E. A., 2774
Blair, H. A., 5123, 5233
Blair, R. K., 784, 5256
Blake, H., 1054, 1055
Blanchard, P., 6681
Bland, D., 3202
Blankenship, A. B., 2327, 5807
Blanton, S., 879
Blasum, F., 58
Blättner, F., 58
Blättner, F., 5400
Blatz, W. E., 1669, 1670, 1671, 1672, 1673, 1674, 3203, 3204
Blau, A., 1667, 5401
Bleuler, E., 2435, 5084, 5896
Bleyer, A., 819, 1382, 4075

Blind, E. E., 3619
Blitzsten, N. L., 5301
Block, H., 335, 4849
Block, M., 375, 5402
Block, V. L., 1675
Blondel, A., 594, 681
Blood, R., 624, 674
Bloomster, M., 4337
Bluemel, C. S., 5910
Blum, H. F., 2790
Blum, H. F., 2790
Blum, H., 4548
Boas, F., 3620
Bobbitt, J. M., 1112
Bober, H., 141, 4548
Bobker, H., 141, 113
Bockoven, S., 75
Boda, I., 4454
Bodechtel, G., 3306 Boda, I., 4454
Bodechtel, G., 306
Bodenheimer, F. S., 880
Bodian, D., 3307
Bodo, R. C., 5836
Boenheim, C., 1676
Boettiger, E. F., 6675
Bogardus, E. S., 3403
Bognár, C., 743
Bognár, C., 743
Bogoslovski, A. I., 716, 2855, 5732
Bogush, N. R., 4750 Bogoslovski, A. I., 716, 2855, 5732
Bogush, N. R., 4750
Böhm, F., 4455
Böhme, K., 1677
Böhmfalk, S. W., 5256
Boisen, A. T., 6380
Boisecau, J., 2274
Bojar, S., 39, 3405
Boje, O., 680
Boidrey, E., 5711
Boldrini, B., 4956
Boldt, W. H., 3544
Bollea, M., 5302
Bologa, L., 5033, 6603
Botton, B., 5679
Bonaparte, M., 252, 4733
Bond, E. A., 503, 3713, 6113
Bond, E. D., 4403
Bonger, W. A., 5478
Bonhoeffer, K., 4076
Bonk, E., 5988
Bonnafoux-Sérieux, —, 3531, 6398
Bonnardel, R., 3447 Bonhoeffer, K., 4076
Bonk, E., 5988
Bonnardel, R., 3447
Bonnert, V., 3308, 3309, 6196
Bontila, G. C., 6063
Booth, E., 820
Booth, G. C., 336, 337, 3049
Boothy, W. M., 742
Borans, H., 4983
Borchers, O. J., 5404
Bordley, J. E., 1779
Borel-Maisonny, S., 3095, 4855
Borgeson, G. M., 3161
Boring, E. G., 8, 2198, 2700, 3774
Borkenau, F., 376
Bornemann, E., 6064
Bornstein, B., 1349
Borowiecki, S., 4077, 4078
Bos, M. C., 2525
Bosch, G., 3532
Bosch, G., 3532
Bosch, W. C., 2211
Bossard, J. H. S., 2526, 5989
Bostack, J., 5911
Bostroem, A., 5303
Bott, H., 2159
Boudreau, E. N., 2436
Bouman, H. D., 1114
Bourwieg, H., 2495
Bowers, R. V., 5085
Bowles, H. H., 564
Bowman, K. M., 1383, 3120
Boyd, L. G., 1115
Boyd, T. E., 625, 7:02
Boyd, W. C., 1116
Bosler, E., 5837
Braasch, G. H., 5592
Braat, J. P., 1472
Braatdy, T., 821, 3704
Braccland, F. J., 4403
Bracketa, I., 1796
Bradford, E. J., G., 1988
Bradford, F. K., 5234
Bradder, C., 3205, 5304
Bradner, H., 1187

Bradway, K. P., 1384, 1511, 1650, 1651, 5990
Bragg, A. N., 4671
Braitzewa, L. I., 2285
Bram, I., 266
Bramwell, B. S., 3050
Brandenstein, B. v., 934, 2199, 3257
Brandt, H. F., 1712
Brandt, H. F., 1712
Brandt, H. F., 1712
Brandt, H. F., 3838
Bratt, N., 5380
Brauchle, A., 2399
Bräuer, D., 6381
Braun, G., 762
Braun, G., 762
Braunmühl, A. v., 2952
Braunmühl, A. v., 2952
Braunmühl, A. v., 2952
Braunmühl, A. v., 135, 1815, 2322, 2851, 3925
Brazier, M., 5955
Brazier, M., 5955 3925 Brazier, M., 5955 Brecher, G. A., 682, 5733 Breed, F. S., 3174 Bregadze, A. N., 1188, 1189, 1190, 1191 Breed, F. S., 31/4
Bregadze, A. N., 1188, 1189, 1190, 1191
Bremer, F., 3309, 3310
Brendgen, F., 6084
Brenning, R., 2791
Breny, J., 2067
Breslau, A. M., 2831
Breyer, R. F., 5500
Bricker, J., 1313
Brickwedde, F. G., 5187
Bridgman, C. S., 76, 1116
Bridgman, P. W., 4456
Bridgman, P. W., 4456
Bridgman, P. W., 2400
Briggs, E. S., 5405
Brill, J. G., 6550
Brill, M., 1652, 3028
Brink, F., 5718
Brink, F., 5718
Brink, F., Jr., 1056
Brines, I. T., 142
Briscoe, G., 6302
Bristol, M. C., 5406
Britte, B., H., 143, 377, 1512, 2527, 3051, 4619, 4856
Britten, F. H., 6492
Britton, S. W., 745
Brocke, F., 3258
Brock, F., 3258
Brock, R. S., 2953
Brock, B. S., 5495
Brody, D., 565
Brogden, W., 5034, 5479 Brock, R. S., 2935
Brockhausen, K., 2437
Brock-Utne, A., 4224
Brody, D., 565
Brogden, W. J., 717, 2328
Bromberg, W., 5034, 5479
Bromberg, W., 5034, 5479
Bromberg, W., 5034, 5479
Bromberg, W., 626, 1056, 5696, 5718
Bröng, J., 77
Bronstein, A., 4549
Brookhart, J. M., 627, 795, 1293
Brooks, C. M., 1092, 2246, 2356
Brophy, L., 4325
Broonan, J. J., 5702
Brown, T., 6303
Brousseau, A., 268
Browman, L. G., 3992
Brown, A. J., 962
Brown, A. W., 1385, 4079, 4275, 3048
Brown, B. H., 4734
Brown, C. W., 240, 4723, 5235, 6275, 6276, 6279
Brown, E. J., 5545
Brown, E. V. L., 5734
Brown, F., 489
Brown, F., 489
Brown, F., 489
Brown, F., 489
Brown, F., 586, 1589, 4832, 6050
Brown, G. D., 6120
Brown, G. D., 6120
Brown, G. M., 117, 1192
Brown, R. H., 90, 1117, 1192
Brown, R. H., 90, 1117, 1192
Brown, R. H., 90, 1117, 1192
Brown, S. F., 3052, 4857
Brown, W., 144, 145, 1193, 4047
Browne, J. S. L., 5864
Brubaker, E. A., 909
Bruce, R. H., 1514, 332
Brueckner, L. J., 2095, 4327
Bruel, O., 1903, 3533, 4080, 5236
Brugger, C., 3534, 3621, 5305, 5306, 5913, 6382

Bujas Bujas Bulan

Bull, Bull, Bulma Burnk Bünni Bürck Burea Bures, Buret, Burge Burge Bürge Burge: Burk, Burka Burke, Burkh Burkh Burkh Burks, Burks, Burling Burlou Burns. Burns, Burr, I Burri, Burrow Burt, (Burt, I

Büssow Buswel Buttorii Butteri Butteri Buxton Buys, I Bychow Byng, I Cabot, Cabot, Cage, I Cahane Cahane Calabre Calavre Caliver, Calzavre

Busatt Bussch Busse,

Camero Camero Camero Campo Campo Campo Campbe Campbe Campbe Campbe

Brugger, H., 1713, 1965, 3691
Brugger, I., 1966
Bruhn, K., 6676
Brunner, E. D., 2096
Brunner, O., 1118
Brunswik, E., 1678
Brunswik, E., 1678
Brunton, P., 1350
Bruntz, G. C., 3053
Brush, A. L., 5840
Bryan, R. C., 504
Bryan, R. C., 504
Bryan, R. C., 504
Bryangelson, B., 1515, 1989
Bryson, L., 4858
Bubb, F. W., 5086
Buchanan, A. R., 2890
Buchholz, B., 6383
Buchholz, F. K., 78
Buchner, F., 6304
Buchner, C., 1904
Buchtlal, F., 9, 4545, 6231
Buck, H., 1780
Buckingham, B. R., 4328
Buckley, H. B., 2097
Buck, H., 1780
Buckingham, B. R., 4328
Buckley, H. B., 2097
Buck, P. C., 629, 651, 3321, 5125
Buel, J., 1193
Bugelski, B. R., 199
Bugelski, B. R., 199
Bugelski, R., 6277
Buhler, C., 2160, 3761, 5586, 6677
Bulas, R., 3450, 5992, 6085
Bulaa, Z., 2792, 5735, 5736, 5992, 6085
Bulanova, Z. V., 102
Bull, H. O., 1119 Brugger, H., 1713, 1965, 3691 6085
Bulanova, Z. V., 102
Bull, H. O., 1119
Bull, N., 3994
Bulman, M. W., 2438
Bumke, O., 5124, 6357
Bunch, M. E., 146, 5205, 5206
Bünning, E., 2793, 3352, 5237
Bürck, W., 3353
Bureau of Public Roads, 3135
Bureau, C. E., 2200 Bureau of Public Roll Bures, C. E., 2200 Buret, L., 881 Burg, J. C., 2069 Burger, J. W., 3995 Bürger, M., 5623 Burgess, E. W., 5985 Burk, D., 6146 Burger, M., 5085
Burges, E. W., 5985
Burk, D., 6146
Burkamp, W., 10
Burke, A., 5022
Burkhardt, F., 5629
Burkhardt, H., 4225
Burkholder, P. R., 4550
Burks, F. W., 4859
Burlingham, S., 1590
Burloud, A., 11
Burns, E. M., 4081
Burns, Z. H., 4620
Burr, E. T., 963
Burr, C., 3865
Burt, C., 3865
Burt, C., 4195
Burt, H. E., 2070, 6077
Busto, S., 5501
Busschaert, R., 3563, 4142
Busse, H., 2891
Bussew, H., 5914
Buswell, G. T., 4329, 4330
Butorin, V. I., 4751
Buttermack, F., 806
Buxton, C. E., 746
Buyse, E., 2439
Bychowakl, G., 2402 Buys, E., 2439 Bychowski, G., 2402 Byng, E. S., 5502

1650,

3257

851,

190,

27,

18

Byng, E. S., 5502
Cabot, P. S. de Q., 3592
Cabot, R. C., 4226
Cage, M. B., 6604
Cahane, M., 4082
Calabresi, R., 6605
Caliver, A., 6607
Caliver, A., 6607
Caliver, A., 6607
Caliver, A., 6607
Casavara, G., 1387
Cameron, D. E., 777, 822, 2257, 3318, 4083
Cameron, M. A., 537
Cameron, M. A., 537
Cameron, W. J., 1679
Cammarata, J. A., 2440
Camp, B. H., 1006, 2701
Camp, W. J. R., 1714
Campbell, A. A., 166, 2334, 3414
Campbell, A. A., 166, 2334, 3414
Campbell, H. G., 3183
Campbell, R. K., 5814

AUTHOR

Campbell, W. G., 3714

Canac, F., 79

Canady, H. G., 3775

Candee, B., 551, 2071

Canella, M. F., 4457, 4672

Canesi, A., 3054

Canivet, N., 950

Canning, G. A., 1516

Cannon, W. 4508

Cannon, W. B., 630, 1057, 1888

Cantele, P. G., 3487

Cantor, N., 2057, 5480

Cantril, H., 253, 405, 1517, 1518, 3055, 3627, 5407, 5993

Canuto, G., 5903

Capone, G., 3029

Card, J., 2921

Carhart, R., 5408

Carlberg, K., 5308

Carleton, E. H., 80

Carlson, E. A., 1905

Carlson, H. B., 1194

Carlson, H. M., 3676

Carlson, W. S., 5841

Carmichael, E. A., 5679, 5863

Carmichael, E. A., 5679, 5863

Carmichael, F. A., 6384

Carmichael, F. A., 538, 1022, 1281

Carmody, F. J., 2002

Carpenter, C. R., 3933

Carr, A., 6046

Carr, H. A., 4621

Carrell, J. A., 4860

Carroll, R. P., 2098, 6494

Carter, J. W., Jr., 1007

Carter, J. W., Jr., 1007

Carter, J. W., 3451

Cassone, V. J., 2441

Cassellano, V., 4438

Castelloni, A., 4861

Cate, J. ten, 1058, 1059, 1060, 1742, 3452

Cathcart, E. P., 4673

Cattell, J. McK., 595

Cattell, R. B., 882, 1519, 2661, 2000 3452 Cathcart, E. P., 4673 Cattell, J. McK., 595 Cattell, R. B., 882, 1519, 2661, 3715, 4228, 5208, 5209, 5587, Cattell, R. B., 852, 1519, 200, 3715, 4228, 5208, 5209, 551 6385
Causse, R., 2794
Cavan, R. S., 4229
Celis, S., 2896
Cénac, M., 269
Center, S. S., 505, 5546
Centini, —, 1398
Chalissov, M. A., 4674
Challman, S. A., 935
Chambers, A. H., 6216
Chambers, F. T., Jr., 1957
Chamié, C., 5630
Chandler, A. R., 5409
Chang, H. T., 1743
Chang, T. T., 75238
Channell, R., 6067
Channell, R., 6067
Chant, S. N. F., 3204
Chao, I. P., 1867
Chapman, F. L., 2622
Chapman, F. S., 3056, 4862, 5410
Chapman, F. S., 3056
Chapman, R. M., 3776
Chapman, F. S., 3056
Chapman, R. M., 3776
Chapman, R. M., 3716, 4863
Chase, A. M., 2795, 3827
Chase, G., 1647
Chase, W. W., 671, 2672
Charles, E., 1520
Chase, G., 1647
Chase, W. P., 648, 1195
Chase, G., 1647
Chase, W. P., 648, 1195
Chasell, J., 4196, 6358
Chastain, L. L., 755
Chauchard, B., 4509
Chave, E. J., 566, 6608
Cheetham, R. W. S., 3989

Chave, E. J., 566, 6608 Cheetham, R. W. S., 3989

Chen, L. K., 1653
Chen, M. P., 1744, 1745, 1746, 1747
Chen, Y. T., 1633
Chen, Z. T., 5476
Cherman, L., 4675
Chesher, E. C., 879, 5915
Chia, K. F., 200
Chiapelli, A., 2599
Chiavacci, L., 823
Chiba, T., 3593
Chichinadse, N., 1110, 1182, 1778
Child, I. L., 6234
Child, E. C., 5547
Child, E. C., 5547
Child, R. C., 5547
Chorly, R. J., 5737
Chornyak, J., 4404
Chou, H. C., 1196
Chou, S. K., 5738
Choulman, E., 4676
Christensen, E. H., 2357, 2358, 2359, 2360
Christoffel, A., 1680
Christoffel, A., 1680
Christoffel, H., 6678
Christoffel, H., 6678
Christoffel, H., 6678
Christoffel, M., 1680
Christoffel, M., 6787
Claparède, E., 2202, 2442, 2702
Claparède, E., 2203, 2442, 2702
Claparède, E., 2202, 2442, 2702
Claparède, E., 2203, 2442, 2702
Claparède, M., 8, 5153
Clark, L. B., 5153
Clark, L. B

Comellini, A., 1475 Comm. Educ. Res., Univ. Minn., 506 Comm. Educ. Res., Univ. Minn., 506
Comroe, J. H., 748, 2361
Conklin, E. S., 3165
Conklin, R. E., 4868
Conn. J. H., 4408
Connor, W. L., 6611
Conrad, H. S., 4475
Constantinescu, I., 2444, 2445, 2467, 2484, 2485, 2486, 2487
Conte, G., 3453
Conway, C. B., 81, 537
Cook, C., 1788
Cook, L. C., 5681
Cook, R. C., 1521
Cook, S. W., 1522, 4910
Cook, T. W., 4622
Coolidge, H. J., Jr., 1174
Comber, H., 201
Coombe, C. H., 202, 241, 2385, 3996
Coon, B. L., 4330, 6087 Coombs, C. H., 202, 241, 2

On, 19, 4330, 6087

Cooper, E. L., 203

Cooper, J. B., 148, 4998, 5210

Cooper, J. E., 389

Copeland, H. A., 6578

Copelman, L., 903, 4711, 4949

Coppel, G., 1151, 3824

Corbett, H. V., 1122

Corbin, H. H., 6587

Corlette, M. G., 5154

Corlette, M. G., 5154

Cörmann, R., 5239

Cornell, C. C., 6306, 6313

Cornelli, G., 1284

Cory, D., 13

Cosmulescu, I., 2488 Cormann, R., 3239
Cornelli, G., 1284
Correlli, G., 1284
Cory, D., 13
Cosmulescu, L., 2488
Cossetti, G., 1123
Coster, A., 2791
Cotte, J., 1868
Cotte, S., 1868
Cotter, S., 1868
Cotterell, L. S., Jr., 2529, 3058
Council of British Ophthalmologists, 2278
Courbon, P., 6147
Courlander, H., 2796
Courtia, S. A., 3207, 4333, 4334
Courtille, C. B., 2957
Cousinet, R., 968
Couttan, F. R., 3934
Courtille, C. B., 2957
Cousinet, R., 968
Couttan, F. R., 4957, 4958, 4959, 6065
Covaciu-Ulmeanu, F., 3454, 4677
Covell, W. P., 3828
Cowan, S. L., 2247, 6198
Cowell, C. C., 1476
Cowen, P. A., 6088
Cowles, J. T., 149, 718, 1197
Cox, J. W., 2330
Cozens, F. W., 936
Craft, J. H., 4754
Crafts, L. W., 2330, 4459
Craig, D. R., 204
Craig, W., 1991
Craik, K. J. W., 5155
Cramer, H., 14
Crane, M., 5000
Crawford, B. H., 1285, 2314
Crawford, C. C., 4335
Crawford, G. W., 507
Craek, M., 5917
Crew, F. A. E., 150, 2856
Crichton-Miller, H., 271
Crider, B., 381, 1869, 3208
Crinis, M. de, 4755
Criseey, O. L., 568
Criswell, J. H., 382
Crook, M. N., 2496
Crooks, L. E., 6071
Crookshank, F. G., 812, 3489
Crook, M. N., 2496
Crooks, L. E., 6071
Crookshank, F. G., 812, 3489
Crooks, L. E., 6071
Crookshank, F. G., 812, 3489
Crooks, L. E., 6071
Crookshank, F. G., 812, 3489
Crooks, L. E., 6071
Crookshank, R. M., 1062, 1678
Crulkshank, R. M., 1062, 1678
Crulkshank, R. M., 1062, 1678
Crulchfield, R. S., 46 5156 Cruikshank, R. M., 1062, 1678 Crutchfield, R. S., 46

Csech, A. G., 3991, \$151
Csik, L., 4085
Cuff, N. B., 969
Culler, E., 621, 1063, 1124, 2328
Culler, E. A., 2857, 4623
Culler, E. A., 2857, 4623
Culler, E. A., 2857, 4623
Cullinan, M. C., 1477
Cumminga, C. K., Jr., 3166
Cumminga, S. B., Jr., 83, 4608
Cunningham, C. W., 2703
Cupcea, S., 4819, 4960, 5028, 6415, 6442, 6452
Curran, F. J., 1199, 2958
Curry, R., 3059, 4231, 6496
Curri, G., 1286
Curri, G., 1286
Curri, G., 1286
Curri, G., 1286
Curri, R. J., 6199
Curria, Q. F., 180, 838, 1391
Curtis, R., 4756
Cushman, R. A., 4277
Cusick, P. L., 2849
Cutler, E. C., 3870
Cutright, P., 3167
Czapigo, W., 4232
Dabelstein, D. H., 5972

Dabelstein, D. H., 5972 Dahlberg, G., 5312 Dahlfeld, C., 3358 Dalbiez, R., 255 Dantierd, C., 3538
Dalbiez, R., 255
Dalcq, A., 2704
Dale, E., 569
Dallenbach, K. M., 2705, 3777, 5631, 5725
Dalton, J. W., 2978
Daly, I. de B., 1782
Dam, L. v., 1287
Daniel, J. F., 1064
Dannemann, A., 6612
Dantchakoff, V., 3843
Darling, F. F., 4864, 5240
Darling, R., 3313
Darling, R., 3313
Darlington, H. S., 807, 5411
Darrock, J., 1967
Darrow, C. W., 1288, 3313, 5632, 5682 Darroch, J., 199, Darrow, C. W., 1288, 3313, 5632, 5682 Dart, C., 6307, 6313 Dasagupta, J. N., 4219 Dashevsky, A. T., 3871 Dashiell, J. F., 1523, 3060, 3935, 4624 Dashevaky, A. T., 3871
Dashiell, J. F., 1523, 3060, 3935, 4624
Datta, A., 1009, 1010, 3778
Daumeson, G., 6229
Dautrebande, L., 2893
David, F. N., 2706
David, M., 2967
Davidenkov, S. N., 4757
Davidenkov, S. N., 4757
Davidenkov, S. N., 4757
Davidenkov, J. G., 4097
Davidson, C. M., 6667
Davidson, M. H., 6468
Davidson, M. H., 6468
Davidson, P. E., 457, 6497
Davia, B. E. C., 937
Davia, B. E. C., 937
Davia, E. A., 570, 1682
Davia, F. C., 15, 5591
Davia, F. C., 15, 5591
Davia, F. C., 15, 5591
Davia, H., 632, 1125, 3314, 4510
Davis, H. C., 2100
Davia, L. E., 4570
Davia, R., 2530, 4086
Davia, R., 2530, 4086
Davia, R., 2530, 4086
Davia, R., 2641
Davia, R., 1664
Davia, R. C., 6308
Dawley, A., 2674
Dawson, E. M., 4814
Dax, E., 315
Day, H. G., 4415
Day, L. C., 2101
Dayton, N. A., 2959, 3537
Deacon, J. R., 3538
Dean, C. D., 2531
Dearborn, W. F., 2532, 2675, 4407, 5994
De Benedetti, M., 3136
Debesse, M., 970, 971

5994
De Benedetti, M., 3136
Debesse, M., 970, 971
DeBoer, J. J., 972
Dechaume, J., 1907, 1908
De Cigna, V., 1126, 6235
Dederding, D., 2797
De Gaetano, R., 1393
DeGruchy, C., 6629

Dékány, I., 3594
Delaville, G., 920
Delay, J., 1909
Delgado, H., 1910, 2960, 3779
Del Greco, F., 1394, 1395
Dell'Amore, D., 3121
DeLong, V. R., 4985
Delmas-Marsalet, P., 6389
Delmond, J., 6390
Del Pozzo, C. U., 4942
Dembo, T., 1346
Demiashkevich, M. J., 5412
Demmler, H., 1524
Demoor, J., 4678
Deneke, T., 6498
Denetrescu, T. R., 2471
Denker, A., 6236
Dennia, C., 5694
Dennis, M. G., 2676
Dennis, M., 2162, 2676, 4408
Dent, J. Y., 826
Dept. Psychol., Harvard Univ., 3259
Derryberry, M., 514

Dept. Psychola, Harvard Univ., 3259
Derryberry, M., 514
Dershimer, F. W., 5918
Deshales, O., 1911
DeSilva, H. R., 3693, 3694, 4296, 4297, 4298, 4299, 4301, 4961, 6066, 6067, 6068, 6069
Desmet, T., 1683
Desoille, H., 2279
D'Espallier, V., 6613
Despert, J. L., 1684, 3209, 5593
Despres, M. A., 4197
Deutsch, A., 4788
Deutsch, F., 3359
Deutsch, H., 2446
Deutsche, J. M., 973
Devereux, G., 2533
Devignievielle, J., 1870

Deutsch, F., 3359
Deutsch, H., 2446
Deutsche, H., 2446
Deutsche, J. M., 973
Devereux, G., 2533
Devignievielle, J., 1870
Dewar, H., 4233
Dewey, J., 2707
Dewulf, A., 6200
Dewyn, M., 2896
Dexter, E. S., 3260
Dhunjibbor, J. E., 4087
Dickenson, M., 5995
Dickenson, H. F., 4336
Dickerson, R. E., 5549
Dickinson, Z. C., 2150, 5504
Dickerson, R. E., 5549
Dickere, M. R., 2102
Diebschlag, E., 1289, 3415
Dieterich, W., 1992
Dieterich, W., 1992
Dieterich, W., 1992
Diet, P., 1896
Dieulefait, E. C., 2708
Dies Canseco, F. F., 5919
Diel-Gasca, M., 3136
Di Giorgio, M., 3872
Dilger, J., 2600
Dill, D. B., 2601, 2918, 4301
Di Michael, S., 6149
Dimitrijević, D. T., 5920
Dimitroff, M., 4625
Dimock, H. S., 2677
Dimolescu, A., 2447, 2448, 2468
Dines, A. E., 450
Dishoeck, H. A. E. v., 4679
Dishong, G. W., 5313
Dittler, R., 6309
Dixon, C. M., 6121
Dmitriev, G., 4730
Dodd, K., 4135
Döderlein, W., 5158
Dodge, R. L., 2204, 2205
Dodge, R., 2766
Doemschate, G. ten, 85
Dol, M., 3314, 5315
Dol, N., 7115
Dolg, D., 3622
Dolch, E. W., 4338
Donohue, E. K., 3109
Dovo, L. W., 3623
Dooley, L., 6359
Dorcus, R. M., 2904, 4461
Dorff, E., R., 151, 1200
Dorff, G., B., 5921
Dorfman, R., 2709
D'Ormea, A., 1398
Doroar, J., 3211

Dosios, A., 2471 Dougall, J. W. C., 3624 Douglas, H. B., 5550 Douglas, O. B., 3717 Douglase, H. R., 2121, 3164, 4339, Douglase, H. R., 2121, 3164, 4339,

Douglas, O. B., 3717
Douglass, H. R., 2121, 3164, 4339, 4993
Douin, R., 5741
Doupe, J., 5863
Down, R. S., 1065, 2894
Dowsenka-Lecka, H., 4078
Dowsenka-Lecka, H., 4078
Dowsenka-Lecka, H., 4078
Drabab, J., 490, 2633
Dragan, H., 2588
Dragntedt, L. R., 749
Drake, C. A., 2072, 2073, 4300
Drake, R., 4340
Drapkin, I., 6148
Dresser, R., 3455
Drever, J., 4341
Driest, W., 2458
Drohocki, Z., 3829, 3830
Drukker, L., 1591
Drummond, F. H., 3929
Drüner, R., 5996
Dryjski, A., 3780
Dublitscher, F., 6391
Dublineau, J., 6392
Dubner, H., 2820
Dubner, H., 2820
Dubois-Poulsen, —, 1814
Dubuisson, M., 1290
Ducasse, C. J., 5413
Dücker, F., 3718
Ducoste, M., 300
Dudensky, I. V., 3936
Dudycha, G. J., 338, 386, 4834, 5742
Dudycha, M. M., 5742

Dudycha, 5742

Dudensky, I. V., 3930
Dudycha, G. J., 338, 386, 4834, 5742
Dudycha, M. M., S742
Dufrenoy, J., 5087
Duia, B., 2962
Dukea, E., 6122
Dunbar, H. F., 2449, 3490, 5922
Dunbar, H. F., 2449, 3490, 5922
Dunbar, H. F., 2449, 3490, 5922
Dunbar, J. W., 347, 5633, 6114, 6149
Dunne, J. W., 4735, 5634
Dunne, J. W., 4735, 5634
Du Noyer, R., 2282
Düntzer, E., 3695
Dupee, C. W., 2103
Duplessis, G. L., 5635
Durea, M. A., 461, 462
Durost, W. N., 5661
Durrell, D. D., 2104, 2105
Duškova, V., 2895
Dusser de Barenne, J. G., 633, 1291, 210, 3315, 5126, 5127, 5683, 5684, 6201
Dussik, K. T., 1912
Duryce, W. R., 2206
Du Tell, R., 3282
Duwadd, V. F., 3043
Duyvenne de Wit, J. J., 5844
Dwyer, P. S., 1011, 1716, 2624, 3261, 6090
Dwyer, R. M., 4409
Dybowski, M., 5241
Dykema, P. W., 3625
Dymling, O., 2798
Dysinger, D. W., 4198
Eads, L. K., 2028

Dysinger, D. W., 4198

Eads, L. K., 2028

Eagle, B., 4680

Eagleson, O. W., 1993, 6499

Eamea, T. H., 938, 5997, 6237

Earl, C. J. C., 1400

Easiey, H., 152

East, E. M., 6393

East, W. N., 4759

Eastburn, L. A., 506

Eaton, M. T., 1850

Ebaugh, F. G., 847, 5379

Ebbecke, U., 3997

Ebbinghaus, J., 3626

Eberhardt, W., 6552

Eberhardt, H. G., 3168

Eccles, A. K., 2871

Eccles, J. C., 634, 1752

Echlin, F., 3831

Eckert, J. 5159

Eckert, J. F., 2926

Eckstein, L., 1968, 5414

Ectors, L., 635, 649, 3320

Edel, A., 596

Edgell, J. A., 5522
Edgerton, H. A., 16
Edmiston, R. W., 509
Edwards, H. T., 2601, 2918
Edwards, N., 3729
Eells, K. W., 2625
Eells, W. C., 510, 2626
Efmov, V. V., 4554, 4555, 5743
Egan, J. P., 5143
Eger, H., 3873
Eghers, H., 3360, 5160
Ehrenberg, W., 5161
Ehrenfels, C. v., 17
Ehrenbardt, H., 2283
Ehrenstein, W., 1969, 3361
Ehrhardt, A., 5415, 5998
Ehrhardt, K., 5551
Eichler, W., 2248
Eidelberg, L., 6360
Eilinova, M. B., 4556
Eilks, H., 1717
Eisenberg, P., 339, 1478, 4865
Eisenbud, J., 2963
Eisenson, J., 387, 388, 4866
Eiserhardt, H., 5999
Eisler, R., 6000
Eisner, H., 1617
Eider, J. H., 2366
Eiderton, W., 2311, 4342
Elkind, H. B., 4343, 5923
Elliott, F. R., 921, 2074, 2602, 3137
Elliott, M. H., 153
Ellis, W. D., 6151

Ellson, D. G., 154, 1201
Elmerich, —, 1994
Elmgren, J., 3782
Elaberg, C. A., 2284, 2799, 5744, 5745, 5746, 5747, 5748
Elsenhans, T., 3262
Elwell, J. L., 5809
Elwin, V., 389
Embree, R. B., Jr., 4344
Emerson, H., 450
Emerson, M. R., 4390
Emery, E. van N., 4986
Empery, E. van N., 4986
Emmett, W. G., 5505
Endara, J., 1913, 2059
Engel, A. M., 1654
Engel, E., 4410
Engelhardt, M. D., 6091
Engelhardt, M. D., 6091
Engelehardt, M. D., 6091
Engelehardt, M. D., 6091
Engelehardt, M. D., 6091

Engel, A. M., 1654
Engel, E., 4410
Engels E., 4410
Engelsmardt, M. D., 6091
Engelsmann, R., 1526
Engerth, G., 4088
Englhardt, N., 1914
English, H. B., 2207, 2964, 4462
English, V. P., 3263
Ennever, W. J., 6152
Enroth, E., 1127
Ensor, C., 760, 1270, 2353, 2369
Epstein, A. L., 4760
Epstein, A. L., 4760
Epstein, A. S., 4761
Epstein, R., 5594
Erickson, E. M., 5274
Erickson, I., 2965
Erickson, M. H., 275, 1351, 2450, 2966, 5274, 5897
Erickson, T. C., 1816
Eriksen, R., 3783
Erlanger, J., 2774
Ermisch, H., 1807
Ernst, H., 276
Erdeben, W., 18
Escardó, F., 5928
Escher-Desrivières, J., 710, 4557
Eschweiler, H., 3874, 5749
Esseen, J. V., 2208, 2209, 2363, 2364, 3456, 3784, 5088, 6153
Esseen, K. W., 5914
Esseen, M. W., 5914
Esseer, F. H., 3785
Estes, S. G., 4835
Ets, H. N., 623
Ettlinger, F. X., 6394
Eugster, J., 5316
Eulenburg-Wiener, R., 6311
Euler, U. S. V., 5839
Eurich, A. C., 3719
Evans, J. E., 2730
Evans, J. E., 2730
Evans, J. N., 3875

Evans Evans Evert Ewald Ewele Ey, H Eyre, Eyste

Fabris Fabry Facon Fage, Fahre Faillie Fairba Fairba Fairch Fairlie Fallga Famà, Fambi Fannis Farber Farfel, Faria o Faris, Farkas Farkas Farnel

Farth, Fattov Fauntl Faure-Fauvil Faville Faville Favilli. Fawcel Fay, P Fearing Fearon Feathe Feder. Federa Fedoro Fedoro

Fediae Fee, M Feingo Feitelb Feives: Feldma Feldma Feldma Feldste Fellbric Fender Fender Fendrich Feniche Fenlase Fenn. Fennel Fenton Fenton enton

Fenyve Ferdi**èr** Fergus Fergus Fergus Ferraro Ferree,

Ferrio. erven Ferven Fessard Fichano Fielder, Field, 1 Fillère, Fillmor Finan, Finch.

Evans, J. W., 2678 Evans, L. T., 3061 Everts, E. W., 5552 Ewald, G., 6395 Eweler, S., 6396 Ey. H., 278, 3531, 6397, 6398 Eyre, M. B., 6312, 6313 Eyster, J. A. E., 683, 778, 2376 Feder, D. D., 1655, 3169, 4987, 5382, 5561
Feder, P., 5275
Fedorov, N. T., 5751
Fediaevaky, V., 3170
Fee, M., 5019
Feingold, G. A., 511
Feitelberg, S., 2249
Feiveson, P., 2907
Feldman, E. S., 4090
Feldman, I. B., 1783, 5752
Feldman, S., 5753
Feldstein, M. J., 6527
Feldman, S., 5753
Feldstein, M. J., 6001
Fender, F. A., 5925
Fendrick, P., 1997, 2332
Feng, T. P., 1753, 1754, 1755, 1756
Fenichel, O., 1352, 1353, 3491
Fenlason, A. F., 3707
Fenn, W. O., 750, 2365, 3316
Fennell, R. A., 5247
Fenton, F., 2679
Fenton, M., 571, 5036, 5037
Fenyes, E., 5926
Ferguson, E. A., 3062
Ferguson, E. A., 3062
Ferguson, H. K., 5506
Ferguson, L. W., 5970
Fernberger, S. W., 2712, 3264, 4464, 5276, 5416, 5638
Ferraro, A., 622
Ferrer, C. E., 1128, 2075, 3138, Ferraro, A., 622 Ferree, C. E., 1128, 2075, 3138, 6580 Ferrice, C. 379
Ferrico, C., 279
Fervers, C., 2451, 5230
Fervers, E., 5212
Fessard, A., 5685
Fichandler, A., 464
Fielder, M., 4412
Field, M. J., 1527
Filatow, D., 1129
Fillibre, M., 2713
Fillmore, E. A., 442
Finan, J., 1767
Finch, G., 2366

37

Fink, K., 3627
Fink, W. H., 4683
Finkleman, I., 4091
Finlayson, A. D., 2535
Finner, P. F., 3457
Finner, P. F., 3457
Finzel, G., 6092
Fiore, G., 1453
Firgau, H. J., 684, 857
Firth, R., 884
Fischbein, E. C., 4092
Fischel, W., 155, 206, 3998, 6278
Fischer, F. P., 85
Fischer, G. H., 858, 5507
Fischer, G. H., 858, 5507
Fischer, G., 1402
Fisher, M. S., 4868
Fisher, R. A., 1012
Fite, M. D., 3217
Fitts, P. M., 207
Fitzgerald, J. A., 4988
Fitzpatrick, E. A., 6093
Flaig, J., 5318
Filzner, J. 5318

Frank, S., 2969
Frankel, E., 1404, 3677
Frankl, G., 4094
Frankl, V. E., 280
Franklin, D. W., 5554
Fransen, R., 514, 573
Fraser, R., 2970, 5955
Frazier, E. F., 2538
Fréchinos, G., 4667
Fredericq, H., 3303
Frederick, R. W., 5555
Freel, A. O., 3287
Freeman, F. N., 1203, 2191, 3174, 5214 Frederick, R. W., 5555
Freel, A. O., 3287
Freeman, F. N., 1203, 2191, 3174, 5214
Freeman, F. S., 4413
Freeman, G. L., 939, 1204, 1292, 2213, 2214, 2367, 4626, 4627, 4688, 5847, 5848, 6315
Freisling, J., 6316
French, R. S., 5165, 5166
French, R. S., 5165, 5166
French, E., 3400
Frende, H., 2899
Fretet, J., 6400
Freud, S., 1354, 2403, 2539, 5277, 6361
Freudenberg, R., 4762
Freunthaller, A., 6004
Freyas, R., 2603
Fribourg, Blanc, —, 6005
Fridrichsen, E., 4483
Friedjung, J., 3265
Friedjung, J., 3265
Friedman, J., 3265
Friedman, M., 3266
Friedman, M., 3266
Friedman, A., 440, 3629
Fries, M. E., 5596
Frisch, C., 2250
Frobenius, L., 6500
Frolov, J., 3832
Frolov, V. P., 1205
Froment, J., 1921
Frommlet, A., 2802
Fröshaug, H., 6401
Fry, G., A., 1785
Fryer, D., 209, 1851
Fuchas, S. H., 2404
Fuchs, W., 3458
Fuyerst, R. A., 5927
Fukutomi, I., 6317
Fulton, J. F., 668, 1757, 2710, 5146, 5231, 5835, 6264
Fumarola, G., 1406
Furgey, P. H., 885
Furtado, D., 310
Fusfeld, I. S., 4207
Gage, H. L., 4235, 4236 Fisher, M. S., 4868
Fisher, R. A., 1012
Fitte, M. D., 3217
Filler, M. S., 4988
Filler, M. S., 3168
Filler, M. S., 3168, 512
Filler, M. R., 1916, 1917, 1959
Filler, M. B., 3512
Filler, F. M., 156
Filetcher, F. M., 156
Filetcher, F. M., 156
Filetcher, H., 5102, 5755
Filetcher, J. M., 2211, 4199
Filotcher, M. I., 1674
Fillinker, R., 519
Fillinker, R., 5319
Fillinker, R., 5306
Fillinker, R., 5309
Fillin

Gault, R. H., 2803
Gaupp, R., 6402
Gavarino, G., 1479
Gavaudan, Mile, 815
Gaw, E. A., 1530
Geary, R. C., 2714, 2715, 2716
Geblewicz, E., 631, 685, 697, 1836, 2773, 2804, 2805
Gebeattel, G. E. v., 6403
Gedevani, D., 1067
Gee, W., 1998
Geffken, W., 88
Gefter, J. M., 4689
Gehlen, A., 21, 5642
Geiseler, W., 6240
Geismer, A., 5167
Geldard, F. A., 22
Gelhorn, E., 756, 4703, 4729, 5321, 5811, 5849
Gemecke, A., 5881
Gemelli, A., 887, 1531, 3032, 3630, 5038, 5168, 5850, 6165, 6501, 6582, 6619
Gengerelli, J. A., 23
Genna, G., 5418
Gentz, W., 911
George, W., 914
Georgescu, I., 2628
Georgiade, C., 4765
George, W., 894
Gerard, M., 6891
Gerard, M., 555, 2710, 5142, 5699
Gerard, M., 597, 1130, 1786
Gerard, M., 597, 139, 1375
Gesmer, C., 2215
Gerloff, W., 6404
Germane, C., 2215
Gerken, C., 2215
Gerken, C., 2215
Gerloff, W., 6404
Germane, C. E., 6620
Gershandovich, Z. S., 4184
Gertz, H., 2806, 5169
Gespell, A., 3211, 3937, 5039, 6155
Gosell, R., 627, 757, 795, 1293, 1313
Gessner, F., 2807
Getman, G. N., 4308
Geyer, H., 581, 5929, 6679
Geba, U. S., 4414
Ghiselli, E. E., 1068, 2335, 3877, 6275, 6276, 6279
Gebbon, E. J., 89
Gibson, E. J., 503
Gibert, R. W., 4459
Gilbert, R. W., 4450
Gillerty, R. H., 4303
Gierlich, W., 6533
Gierlich, W., 6533
Gierlich, W., 6533
Gierlich, R., 525
Giddea, E. F., 5967
Gilbert, R. W., 4459
Gillerty, R. M., 5512
Gilllinger, R. M., 5512
Gilll Gilliland, A. R., 1206 Gilmer, B. H., 686 Gilmer, T. E., 1131 Gilse, P. H. v., 4096 Gilson, A. S., Jr., 639, 2252 Gini, C., 5643 Giorgi, G., 1407 Girard, L., 1852 Girden, E., 5686 Girndt, O., 5242 Gist, N. P., 6006 Gitelson, M., 6680, 6681

Giurca, A., 6583
Givier, R. C., 3366
Glanville, A. D., 211
Glass, D. V., 6502
Glassbury, J. A., 2541
Glasser, W. H., 5759
Glenn, E. R., 3720
Glick, C., 4871
Glick, D., 3833
Gliebe, P. A., 2978
Glover, E., 1355, 2936
Glowik, G., 4237
Glucck, S., 2590, 3122
Gnerlich, G., 66112
Gnügge, E., 2499
Göber, K. H., 1724, 5384
Gotze, E., 1999
Gogava, M., 1277
Gotiein, P. L., 5931
Golant, R. J., 4768, 4769, 4770
Golant, R. J., 4768, 4769, 4770
Golant-Ratner, R., 281
Goldberg, A., 2390
Goldby, F., 1759
Goldenweiser, A. A., 393
Goldman, G., 6202
Goldman, G., 5323
Goldman, G., 5323
Goldman, G., 5323
Goldman, G., 5202
Goldman, G., 5343
Goldschmidt, L., 3754
Goldstein, J., 5898
Goldstein, J., 5899
Goldstein, J., 5899
Goddetin, J. E., 5687
Golde, P., 3789
Goodenough, F. L., 1687, 4989
Goodfellow, L. D., 2003, 2808
Goodwin, J. E., 5687
Gordon, R. G., 5932
Gordon, R. G., 5932
Gordon, K., 4467
Gordon, R. D., 394, 828
Gornik, M. A., 4732
Gorve, F. J., 1853
Gorynski, L., 4000
Goney, E. S., 2900
Goney, E. S., 2909
Gotuchaux, S., 3447
Goziridze, A., 1294
Goszano, M., 1408, 4511, 4630
Graberg, E., 3971
Grady, W. E., 1787
Graewe, H., 6007, 6094
Gräfinghoff, H., 1409
Graham, A., 6654
Granam, C. H., 90, 1783, 1813, 5170
Graham, J. L., 1532, 5813
Graichen, E., 5688
Granik, M., 1789, 2254, 2255, 3834, 5868
Granik, M., 1789, 2254, 2255, 3834, 5868
Granit, R., 1789, 2254, 2255, 3834, 5868
Granit, M., 1789, 2254, 2255, 3834, 5868
Granith, M., 1289 5689
Granström, K. O., 2809
Grant, A., 3195, 4990
Grant, P. M., 2589
Grant, V. W., 3367
Grana, A. M., 1719
Grasse, P. P., 213, 214
Grau, M., 2860
Graves, E., 1295
Graves, E., 1295
Graves, T., 6406
Graves, T. C., 282
Gray, E. F., 4991
Gray, H. A., 4345
Gray, J., 4690, 4691, 4692, 6241
Gray, M. G., 1943
Gray, W. S., 3721, 4346
Gray, R. A., 2109
Gray, W. H., 3173
Gray, W. S., 2630, 3174
Graybed, E., 941
Greeman, N., 2000
Green, H. D., 5129, 5147
Greene, E. B., 942, 943, 944, 964, 1410, 4098
Greene, E. G., 6607

Greene, H. A., 2110 Greene, J. S., 888 Greene, M. B., 4558 Greene, F., 2035 Greene, T. M., 3419 Greenly, R. J., 6070 Greenwald, D. U., 1271 Greenwood, J. A., 3494, 3518, 4051, 5090 Greer, R. H., 674 Greenwald, D. U., 1271
Greenwood, J. A., 3494, 3518, 4051, 5090
Greer, R. H., 674
Greet, W. C., 4872
Gregg, F. M., 5040
Gregg, H. D., 3175
Gregor, A., 465
Grether, W. F., 159, 1132, 2861, 5180
Greulich, W. W., 4415
Greville, T. N. E., 4052
Grewell, F., 2542, 4943
Gridgeman, N. T., 5171
Gridley, P. F., 5041
Griffiths, R., 2179, 4260
Grigoresco, D., 6426
Grindley, G. C., 5809
Grinker, R. R., 1070, 1760
Grinnell, J. E., 4992
Griscom, L., 1174
Groeneveld, C., 1296
Groenouw, A., 687
Groethuysen, B., 91
Grosh, L. C., 5324
Gross, K., 486
Grossman, G., 4944
Grossman, G., 4944
Grossman, M. R., 721
Grossmann, M., 3525
Grove, V., 5326
Gruender, H., 1725
Grubbs, R. C., 765
Gruher, H., W., 1411, 5481
Grünberg, M., 50, 4099
Grünberg, M., 368, 2683, 3212
Grünstein, A., M., 3835, 4512 Grünberg, M. D., 4099 Grünberg, R., 1688, 2683, 3212 Grünstein, A. M., 3835, 4512 Guidora, W., 4772 Guibor, G. P., 5761 Guild, S. R., 4551 Guild, 2151, 2288, 289, 3033, 5644, 6568
Guilford, M. O., 3722
Guilford, M. S., 2692
Guilau, P., 5883
Guillaume, G., 890
Guillaume, P., 598, 3938
Guinchant, J., 256
Guiraud, P., 283
Guilleten, J. E., 5762, 5801
Guillikeen, H. O., 3495
Gummersbach, H., 467, 4304
Gun, W. T. J., 1533
Gundlach, R. H., 395, 1133, 3066, 3867
Gunn, A. L., 2368 Gundlach, R. H., 395, 1133, 3066, 3067
Gunn, A. L., 2368, 4001
Gunther, F., 1761
Gunther, J., 341
Gurevich, M. O., 4095, 4559
Gurnee, H., 1207, 3939, 3790, 4873
Gustafason, A., 2901
Gustav, L., 3940
Guthrie, E. R., 161, 1208, 3416
Gutterres-Noriega, C., 4100
Guttman, A., 4238
Guttman, J., 2256
Guttmann, E., 284, 306, 759, 1412, 4798, 5933
Guynn, K. F., 2405
Gwania, L. I., 4581
Gwinner, K., 3635
Gwynn, —, 6319 Hanck, T., 5420 Häberlin, P., 3597, 5645 Hachet-Souplet, P., 162, 163 Häckel, J., 4874 Hacker, E., 468 Hacker, H. J., 3763 Hackfeld, A. W., 4101 Hackman, R. C., 2411

Hadley, E. E., 3791, 4200, 5385 Haerle, H., 6008 Haerlig, E. W., 5706 Haessler, F. H., 1790 Häfner, K., 6203 Haggeng, 6556 Häfner, K., 6203
Hagemann, —, 6556
Hagentorn, A., 4693
Hagerty, E. F., 6051
Häggquist, G., 5690
Hagman, E. P., 146
Hagood, M. J., 1534
Hahn, A., 3282
Hahn, E. P., 396
Hahn, H., 3368, 3878
Haig, C., 3827, 4560
Haigis, E., 3213
Hailwood, J. G., 1791
Hain, A. M., 1134
Haldane, J. B. S., 2717
Haldi, J., 760, 1270, 2353, 2369
Hales, W. M., 469, 4278
Hall, C. S., 761, 3967, 4002
Hall, G. E., 5687
Hall, M. B., 5934
Hall, M. E., 5387
Hall, R. C., 3033
Hall, R. M., 2810
Hall, V. E., 2902, 2903
Hallbauer, U., 6584
Hallervorden, J., 285, 6407
Haller, M., 5830
Halliday, J. L., 1413, 5327
Hallwell, A. I., 3034, 5936
Hallpike, C. S., 3879
Halpern, L., 5328
Halstead, V., 1071
Halverson, H. M., 4416, 4417, 4418
Hamburger, F., 3214
Hamburger, F., 3214
Hamburger, F., 3214
Hamburger, F., 5123
Hamilton, G., 4875
Hamilton, J. B., 1792, 2290, 3880, 5250
Hamilton, M. A., 5770, 5771, 5772
Hamilin, R. L., 5608
Hamilton, M. A., 5770, 5771, 5772
Hamilin, R. 1427
Hanneelman, H., 1619
Hanseelman, H., 1619
Hardy, G., 6009
Hardy, LeG. H., 1795
Hardy, M., 1779
Hardy, H., 17, 209
Harris, A. L., 1673
Harris, D. B., 5922
Harris, D. B., 5929
Harris, R. E., 1298
Harrison, F., 5136, 5691

Harrison, L. V., 2589
Harrison, R., 2904, 4468
Harsh, C. M., 2217, 5973
Hart, J. K., 5091
Hart, T. 1796
Hartenberg, G., 1922
Hartenstein, E., 1871
Hartge, M., 5422
Hartline, H. K., 643, 2811
Hartmann, A. A., 4275
Hartmann, G., 3067
Hartmann, G., 3067
Hartmann, G., 3067
Hartmann, C. J., 891
Hartmann, N., 27
Hartmann, N., 27
Hartmann, N., 27
Hartwell, S. W., 1415
Hartwell, S. W., 1970
Hasebroek, K., 1797
Hasebroek, K., 1797
Hasebroek, K., 1797
Hasebroek, K., 1797
Hasegawa, T., 4562
Haslerud, G. M., 1416, 5243
Hatanaka, M., 3488
Hatch, C. E., 4880
Hatfield, M., 4279
Hattwick, L. A., 3215, 5598
Hatzold, K., 1417
Haugen, M., 4903
Haumann, R., 4102
Häussler, F., 6156
Haven, S. R., 4974
Havin, H., 4003
Hawk, S. S., 2862, 3068
Hawkins, G., 1630
Hawkins, G. C., 6611
Hayami, H., 3369
Hayashida, T., 1878
Hayes, S. P., 3723
Hayes, S. P., 3748
Haya, H., 1605
Hays, R., 6409
Hasard, J. N., 6558
Harratian, E. A., 4513
Healy, W., 2500
Hearnshaw, L. S., 3140
Hebb, D. O., 688, 1135, 3881, 3882
Heberdey, R. F., 92
Hecker, C. H., 1971
Hecker, W., 2163
Hecker, A. O., 3724
Hecker, A. O., 3724
Hecker, C. H., 1971
Hecker, W., 2163
Heimer, J. F., 3496, 5646
Heinlein, J. H., 3496
Hellifrixach, A., 1641
Hellpach, W., 763, 1014, 6012, 6013
Helling, A., 1606
Helmitz, M., 3636, 6011
Heinlein, J. H., 3496
Helmer, S., 8594
Helmann, H., 1, 309
Heimer, R., 8594
Helmann, H., 1, 309
Helmer, R., 860
Helmitz, M., 4879
Helmann, M., 4608
Helmitz, M., 1608
Helmitz, M., 1608
Helmitz, M., 1608
Helmitz, M., 1609
Helmitz, M

Hen Hen Hen Hen

Herri Herri

Heyn Heyn Hicks Hicks Higgi

Higge Higle Hilde Hilde Hildr Hildr Hilga

Hill, Hill, Hill, Hill,

Hill, Hill, Hill, Hill,

Hiller Hillia Hillye Hilzer Himm Himp Hinck Hinse Hippi Hirah Hirat Hirat Hirsel Hirsel Hirsel Hirsel Hirsel

Hische Hitche Hitsch Ho, Y Hoagl Hobar Hobar Hobar

Henry, E. R., 6095
Henry, F., 2218, 2719, 5092
Henry, F., M., 6244
Henry, G. W., 4103, 5330
Hentig, H. v., 4946
Henze, A., 6612
Herbert, R., 714
Herberts, R., 2545
Herbst, R., 2974
Herland, L., 1480
Herman, K., 4631
Herman, R. C., 791
Heron, W. T., 1210, 3439
Herr, D. L., 4736
Herrick, W. E., 1211
Hering, A., 3196
Herrick, V. E., 1211
Hering, A., 3196
Herring, E. P., 5426
Herring, E. P., 5426
Herring, F. P., 5426
Herring, R. B., 4305
Herskovits, M., 6411
Hersey, R. B., 4305
Herskovits, M., 5044
Herskovits, M., J., 400, 5427
Hertz, H., 4201
Hertz, M., 4004
Hertz, M., R., 1481, 4202
Hertzman, M., 335, 4849, 5647
Hessen, S., 4994
Hetherington, A., 658
Hettwer, J. P., 644 Hess, W. R., 6205
Hessen, S., 4994
Hetherington, A., 658
Hettwer, J. P., 644
Hetzer, H., 975, 2685, 6682
Hetzler, M., 6642
Hetzler, M., 6642
Heubel, F., 4670
Heuer, H., 4349
Heugel, D., 6281
Heun, E., 5278
Heuven, J. A. v., 3371
Hevner, K., 2546
Hewert, H. R., 5858, 5859
Hewlett, I. W., 4419
Heyde, J. E., 28
Heyden, P. M. v. d., 2293
Heyer, G. R., 1015
Heymann, F. K., 1212
Heymann, H., 3595
Heymann, H., 3595
Heymood, K., 2164
Hicks, J. A., 6125
Hicks, O. J., 2077
Higginson, G. D., 29, 2863, 6669
Higley, B. R., 1016
Hildebrandt, K., 3071 Hicks, O. J., 2077
Higginson, G. D., 29, 2863, 6669
Higgons, R. A., 6690
Higgons, R. A., 6690
Higgons, R. A., 6690
Higley, B. R., 1016
Hildebandt, K., 3071
Hilden, A. H., 6096
Hildreth, G., 5042
Hilgard, E. R., 165, 166, 1200, 1213, 2334, 2864, 3941, 4632, 5705, 5814, 6282
Hill, G. A., 3726
Hill, G. E., 517
Hill, J., 1689
Hill, J. C., 4105
Hill, J. C., 4105
Hill, L. B., 2400, 5279
Hill, T. B., 518
Hill, L. B., 2400, 5279
Hill, T. B., 518
Hill, T. B., 518
Hillenbrand, C. J., 625
Hilliard, G. H., 4350
Hillyer, V. M., 577
Hilzensauer, H., 1136
Himmelsbach, C. K., 3547
Himpsel, J., 3176
Hincks, C. M., 4106
Hinney, J. C., 690
Hippins, R., 764
Hirahata, T., 3543
Hirai, T., 1925
Hirata, M., 4697
Hirose, A., 3699
Hirch, G., 6505
Hirach, R., 4107
Hirschfeld, M., 4239
Hische, W., 999, 600, 4995
Hiscock, W. G., 6072
Hitchcock, F. A., 765
Hitchmann, E., 1356, 1539
Ho, Y. H., 1800
Hoagland, H., 2257, 3318
Hoban, C. F., 519
Hoban, C. F., 519, 2136
Hobart, G., 632, 3314

631,

32

Hobiera, W. H. G., 6560
Hochheimer, W., 5331
Hochholzer, H., 6097
Hochman, S., 6412
Hockett, J. A., 4351
Hodges, A. B., 730, 1563
Hodgkin, A. L., 2258
Hodgson, C. H., 5880
Hoel, P. G., 2721
Hoelzel, F., 2906
Hofer, G., 4006
Hofer, G., 4006
Hofer, H., 1540
Hoff, H., 2250, 3372, 3373, 3884, 4775, 6245
Hoff, H. E., 5003
Hoffeditz, E. L., 1651
Hofman, M. N. H., 2627
Hofman, M. N. H., 2627
Hofmann, M., 1621, 4699, 6622
Hofmann, A., 1621, 4699, 6622
Hofmann, N., 9295
Hofstatter, P. R., 5094
Hofstander, N. v., 2975
Hogben, L., 4563
Hojoger, J., 5600
Hohman, L. B., 4420, 6126
Höhnle, M., 1541
Hojo, T., 2722
Hollmook, R. T., 2002
Holland, B. F., 3717
Hollander, W. F., 2812
Hollingworth, H. L., 4964, 5815
Hollingworth, H. L., 4964, 5815
Hollingworth, H. S., 1482, 2115
Hollingworth, H. S., 1482, 2115
Hollinger, R. D. T., 2003
Holmes, E., 3721
Holmes, G., 5856
Holmes, R. W., 1017
Holmes, S., J., 1542, 4880
Holosopple, J. Q., 1419
Holst, E. v., 1137, 4007, 4008, 4633
Holt, J. B., 892
Holt, L. E., Jr., 237
Holth, S., 3885
Holub, A., 601
Holzapfel, M., 6321
Holzapfel, M., 6321
Holzapfel, M., 6321
Holzapfel, M., 6322
Homberger, E., 6681
Homburger, E., 2406, 3497
Homma, T., 3637
Honegger, W., 6158
Hongo, N., 1801, 1802, 1803, 3374
Honjo, I., 1139
Honsik, C. H., 167, 1214, 3942, 6283
Hongis, N., 1801, 1802, 1803, 3374
Honjo, I., 1139
Honsik, C. H., 167, 1214, 3942, 6283
Hongis, C. H., 6014
Hopkins, C. H., 6614
Hopkins, L. T., 520, 521
Hoppock, R., 3700, 4324, 4352, 4382, 4383, 4384, 6614, 6637, 6638, 6654, 6655, 6656 4382, 4383, 4384, 0014, 0037, 6638, 6654, 6655, 6656
Horder, Lord, 4108
Horio, G., 1804
Horn, E., 948
Horn, E. A., 522
Horn, H., 1140
Horney, K., 287, 288
Horowitz, E. L., 6015, 6118
Horowitz, M. S., 2004
Horowitz, R. E., 6015
Horsch, A. C., 3123, 651
Horsch, A. C., 3123, 651
Horst, L. v. d., 2219, 2408, 2409, 2686, 3943
Horst, P., 1018, 2724
Horstmann, W., 289
Horton, F. M., 4687
Horton, G. P., 1208
Horton, R. G., 758, 766
Hosel, R., 2301
Hoskins, A. B., 523
Hoskins, R. G., 822
Hosssine-Arpád, E., 723 Hosseine, K. G., 222 Hosseine-Árpád, E., 723 House, E., 2010 Householder, A. S., 2220, 6189 Houtchens, H. M., 1222, 3598

Houwelingen, E. van, 6506
Houwink, E., 6016
Hovland, C. I., 169, 170, 1357, 3418'
3944, 3945, 6284
Howard, G. W., 2116
Howell, W. R., 3141
Howells, T. H., 1141, 3072, 4634
Howson, J. H., 4868
Hoyland, J. S., 343
Høygaard, A., 6585
Hoyos, J., 5692
Hozer, J., 4306
Hsiao, H. H., 1215, 1656, 1691
Hsie, C. H., 200
Huert, W. H., 4879
Hubbs, L., 3586
Hubert, W., 4881
Huck, W., 4881
Huck, W., 4881
Huck, W., 4881
Hudisawa, S., 6508
Hudson, A. E., 6526
Huengen, R., 5242
Hüffner, B., 1142
Hugenholtz, P. T., 1728, 1972, 2410, 2548, 6159
Hughes, E. C., 2005
Hughes, J., 5130
Hughes, E. C., 2005
Humen, M., 4109
Hühnerfeld, J., 206
Hull, C. L., 2665, 5817
Humensky, J. J., 1420
Humens, J. F., 5807
Humme, J. F., 5807
Hummen, J. F., 5807
Hummen, J. F., 570, 580, 772, 1681, 2370, 4009, 5857
Hunter, W. A., 567, 579, 580, 772, 1681, 2370, 4009, 5857
Hunter, E. R., 4241
Hunter, W. R., 767, 579, 580, 772, 1681, 2370, 4009, 5857
Hunter, E. R., 4241
Hunter, W. R., 767, 579, 580, 772, 1681, 2370, 4009, 5857
Hunter, E. R., 4241
Hunter, W. R., 767, 579, 580, 772, 1681, 2370, 4009, 5857
Hunter, E. R., 4241
Hunter, W. R., 767, 579, 580, 772, 1681, 2371, 3462
Huntington, E., 2371, 3462
Huntington, E., 2371, 3462
Huntington, E., 2371, 3462
Huntington, E., 2371, 3462 Hunter, W. S., 172, 119, 403
Huntington, E., 2371, 3462
Huntington, E. V., 1019,
3499, 6160
Hurlock, E. B., 2165
Huru, T., 344
Hurvich, L. M., 1138, 6247
Husband, R. W., 173, 3035
Husson, R., 2006, 3795, 5648
Hut, L. J., 4514
Hutchinson, J. B., 4353
Huth, A., 976, 1607
Hutt, M. L., 1020
Hütteroth, R., 3888
Huxley, J., 3628
Huxley, J., 3628
Huxley, J., 5858, 5859
Huxtable, Z. L., 6623
Huzella, T., 5693
Hyde, C., 5476
Hylkema, G. W., 5386
Hymanson, A., 830 Iancu, A., 2687 Ichok, G., 2604 Ieaanu, A., 2605 Ignacio, L., 6132 Iinuma, R., 917, 1855 Ikemoto, K., 1872 Imada, M., 6683 Imamura, S., 1143 Imber, I., 1421, 1422 Imburgia, F. S., 1926 Imourgia, F. S., 1926 Immesberger, A., 1593 Imura, R., 5337 Indict, G. P., 4118 Ingle, D. J., 1298, 1299 Ingraham, R. C., 5849 Ingvar, S., 6414

Inman, W. S., 4737
Inui, T., 1973, 6249
Ionasiu, L., 4777, 6415, 6416
Iritani, C., 3463
Irwin, C. C., 1144
Irwin, F. W., 724, 1217, 1218
Isaacs, S., 2688
Isabella, Sister M., 6098
Isabella, Sister M., 6098
Isabella, E. C., 922
Isely, F. B., 1806
Ishida, S., 2296
Ishikawa, H., 1927
Ishiyama, F., 3267
Israel, R. H., 2689
Isserlin, M., 5332
Ito, T., 3375
Ivanitaky, G. A., 1856
Ivanov-Smolensky, A. G., 4637
Ivy, A. C., 767, 2269
Iwai, K., 5043 Jackson, J. A., 1928
Jackson, R., 2221
Jacob, J. S., 5938, 6417
Jacobs, J. A., 3638
Jacobsen, W., 3638
Jacobsen, C. F., 1072
Jacobsen, E., 3599
Jacobsen, E., 4698, 6323
Jacobsen, E., 1358
Jacobsen, E., 1358
Jacdicke, H. G., 1622
Jaensch, E., 3796
Jaensch, E., 3796, 603, 604, 768, 831, 1021, 1807, 1974, 2007, 2725, 2726, 2727, 2728, 3600, 6161, 6586 6586
Jaensch, P. A., 2297, 5173, 6250
Jaensch, W., 1471, 4699, 5044
Jahn, G., 5763
Jahr, H. M., 2690
Jahrreiss, W., 5939
Jakobson, W., 4242
Jakway, I., 6324
Jalavisto, E., 6325, 6326
Jalota, S. S., 524, 1219, 3946
James, E. B., 3016
James, E. B., 3016
James, E. B., 3016
Jameson, A. T., 4947
Jameson, W. E., 6418
Jancke-Richter, U., 4243
Janet, P., 345, 893, 2455, 2729, 4882
Jank, C., 470
Jann, W., 218
Janzen, W., 1145, 1146
Jasper, H. H., 4778, 5131, 6206
Jastak, J., 5558
Jastrow, J., 3639
Jaumann, J., 4564
Jayson, L. M., 290
Jeandelize, P., 3319
Jeannel, R., 4565
Jeans, J. H., 401
Jeffreys, H., 3797
Jelinek, E. M., 2976
Jenkin, P. M., 2308
Jeffress, L. A., 1147
Jeffreys, H., 3797
Jelinek, E. M., 2976
Jenkin, R. L., 4079
Jenkins, R. L., 4079
Jenkins, W. L., 95, 1148, 2298, 2814, 2815, 3889, 4566, 5174
Jenness, A., 2411
Jennings, H., 401
Jennings, H., 402
Jennings, H., S99
Jennes, K., 5649
Jerome, E. K., 2009
Jersild, A. T., 1694, 3217
Jervis, G. A., 3545, 5940
Jeese, H., 1873
Jezkikov, J. J., 5095
Jezler, A., 219
Jochem, B., 3890
Johnson, B., 5601
Johnson, G. R., 3728
Johnson, L., 2730
Johnson, L., W., 4997
Johnson, L., W., 200, 2550, 5428, 5429 Johnson, W. B., 2503, 3601
Jolk, H., 581
Jonck, E., 581
Jones, A. B., 2192
Jones, E., 5280, 5333
Jones, F. N., 2335, 4998, 6285
Jones, G. B., 4868
Jones, G. B., 4868
Jones, H. E., 1695, 3201, 3216, 3464,
4421, 4471, 5215
Jones, J. W., 6251
Jones, J. W., 6251
Jones, T., 6207
Jones, V., 4244, 4883, 5560
Jones, W. L., 3640
Jonesco, J. M., 303
Jonesco, Silesti, N., 6334
Jongbloed, J., 2299
Jonnard, R., 96
Jordan, A. M., 2117, 3177
Jordan, E., 2551
Jordan, H. J., 605, 5860
Jordan, H. W., 6562
Jorgensen, A. P., 2289
Jost, H., 403
Joussian, A., 2011, 3074
Joyal, A. E., 5009
Jucknat, M., 1300
Jugert, G., 5862
Juháss-Schäffer, A., 4567
Jukes, C. L., 6327
Julien, P. F. J. A., 6252
Jung, C. G., 1359, 2412, 6363
Jung, F. T., 4472
Jung, H., 3400
Jung, K., 1301
Jung, R., 1301
Jung, R., 5863

Kabat, H., 647, 5694
Kacakowaka, J., 4354
Kadykov, B. I., 4042, 5829
Kafeva, E. A., 5853
Kafka, G., 2372
Kagen, B., 901
Kahlson, G., 2259
Kahmann, H., 97, 4568
Kahn, E., 5387
Kahn, E., 5387
Kahn, E., 5387
Kahn, E., 978
Kairin, J., 3376
Kairer, J., 4884, 4885
Kallin, A., 6325
Kalmus, H., 769, 2336, 6328
Kaminakil, S. D., 1303
Kamn, B., 808
Kanaiev, I., 3419
Kandaratkaya, K. M., 4779
Kandel, I. L., 1623
Kanetune, K., 3641, 6509
Kanissai, D., 5764
Kanner, L., 2456, 2691, 3764, 4110, 4422, 5334, 5941
Kantor, N. G., 3346, 4523
Kantor, R., 189
Kantor, W. M., 1929
Kao, D., 1302
Kaplan, A. H., 6470
Kapp, F., 2457
Kapp, J., 5482
Kappauf, W. E., 221
Karady, S., 5864
Karasa, L., 1808
Kardiner, A., 1483, 2013
Karfeld, K. P., 4886
Karlin, I. W., 5430
Karre, R., 1765
Karpf, F. B., 2414
Karpunan, B., 2415
Karpowich, P. V., 4700
Karst, K. H., 6419
Karwooki, T., 1149
Karwooki, T., 1149
Karwooki, T., 5766
Kasanin, J., 4803
Kasaoler, O. H., 5865
Katein, G. W., 3947
Katan-Angel, A., 1360
Katkov, G., 32

Kato, H., 5138
Katz, B., 3837
Katz, D., 98, 1809, 2300, 3377, 3891, 5514, 5515, 5650
Katz, D. (Princeton), 405, 1543, 6017
Katz, H. R., 4111
Katz, R., 3377
Kaufman, L., 3036
Kaufman, D., 3306
Kaupp, V., 5767
Kawamura, E., 582
Kawasima, S., 692
Kawin, E., 3766
Kay, G., F., 5561
Kazimirova, S., 4555
Kearney, J., 4780
Kefer, W., 2977
Kehl, H., 3892
Kehrer, F., 3465
Keiba, L., 3378, 3409
Keilbacker, M., 5431
Keiser, S., 5479
Keister, M. E., 583, 3767
Kekcheev, K., 4544, 4569
Keiber, K., V., 5562 Keister, M. E., 583, 3767
Kekrbeev, K., 4544, 4569
Keliher, A. V., 5562
Keller, A. D., 648
Keller, A. G., 5432
Keller, F. S., 3948
Keller, J. F., 3936
Keller, J. F., 4999
Keller, M., 1150
Kelley, G. A., 3602
Kelley, G. A., 3602
Kelley, T. L., 5096
Kelley, T. L., 5096
Kelley, T. L., 2016
Kellogg, C. E., 2937
Kellogg, C. E., 2937
Kellogg, W. N., 1221, 2222, 2337, 2866, 2867, 4638, 6287
Kelly, E. C., 2223
Kelly, E. C., 1544
Kelly, G. A., 1423, 3798
Kelly, W. A., 6128
Kelman, S. R., 1424
Kemp, E. H., 1515, 1152, 5170
Kempe, G. T., 912
Kempf, F. C., 5626
Kendall, E. C., 1299
Kennard, E. A., 4887
Kennedy, F. C., 5626
Kennadl, E. C., 1299
Kennard, E. A., 489, 3320
Kennedy, J. S., 4001
Kennedy, J. S., 4001
Kennedy, J. S., 4001
Kennedy, M., 1425
Kennedy, P. H., 2601
Kennedy, M., 1425
Kennedy, P. H., 2601
Kennedy, R., 6526
Kenet, G. H., 2662
Kepea, P., 2817
Kephart, N. C., 1222, 3678
Keracher, J., 2060
Kerfnyi, K., 3642
Kerr, M., 5651, 5652
Kerr, M., 5651, 5652
Kerr, M., 584
Kerridge, P. M. T., 2552, 6253
Kerridge, P. M. T., 2555, 625
Kerr, W., 947, 2692, 4355
Khaimovich, M. M., 4781
Khait, M. B., 4104
Khranilowa, N., 4682
Kido, M., 6249
Kielberg, S., 5602
Kielbolz, A., 1426
Kiener, F., 3643
Kiemins, C. W., 3768
Kinberg, O., 5338, 5484
Kincheloe, S. C., 3076
King, L. J., 4966
Kinkelin, W., 2381
Kirnhara, H., 6588
Kirls, S. A., 4347
Kirk, W. D., 4347

Kirkendall, L. A., 2014, 6685 Kirkpatrick, C., 2015, 2016, 2553, 3077 Kirkpatrick, C., 2015, 2016, 3077
Kirkpatrick, F. H., 1975
Kirkpatrick, F. H., 1975
Kirkpatrick, F. H., 1975
Kirkley, M., 3078
Kishimoto, K., 4948
Kitamura, S., 4473
Kitson, H. D., 3178, 5000
Klages, L., 6471
Klaue, R., 6208
Klein, H., 6129
Klein, H. M., 747
Klein, H. R., 3230
Klein, M., 2938, 4515
Klein, M., 2938, 4515
Klein, M., 222, 293, 1140
Kleinau, W., 1118
Kleindienst, E., 5339
Kleindienst, E., 5339
Kleindienst, F., 1304
Kleinkecht, F., 1304
Kleinkecht, F., 1304
Kleinkecht, H., 2818, 3379
Kleist, K., 2458
Kleitman, M., 2907
Kleim, O., 3644, 5245, 5415
Klinckert, A., 6254
Klincert, A., 6254
Klinefelter, L. M., 6624
Klinger, M. P., 1381
Klinkebiel, F., 6099
Klinkowstroem, C. v., 174
Klitzke, E., 6511
Klivanskaya, A. A., 4782
Kloos, G., 5097, 5340, 5341 Klivanskaya, A. A., 4782 Klivanskaya, A. A., 4782 Kloos, G., 5097, 5340, 5341 Klopfer, B., 33, 336, 337, 346, 363, 869, 1484, 1499, 4203, 6468, 6472 Kloog, G., 5097, 5340, 5341
Klopfer, B., 33, 336, 337, 346, 363, 66172
Klossowsky, P., 606
Klüver, H., 651, 1074, 3321
Knight, E. V. M., 6162
Knight, R. P., 809, 1361, 2979
Knipp, F., 100
Knoll, W., 3420
Knöß, H., 832, 6563
Knott, J. R., 71, 2776, 2782, 3838
Knott, V. B., 3218, 5606
Knox, E. O., 4246
Knox, J. A. C., 6300
Knudsen, C. W., 6100
Knudsen, C. W., 6100
Knudsen, C. W., 6100
Knudsen, C. W., 6101
Koch, E., 2777, 4701
Kobyashi, S., 979
Köbberling, J., 3546
Kobrak, H. G., 693, 2820, 3894
Koch, E., J., 2961
Koch, E., J., 2961
Koch, E., J., 2961
Koch, E., J., 2961
Koch, E., J., 2968
Koch, K. H., 406
Koehler, R., 4114
Koenig, S., 407
Koeppe, H., 4423
Koffta, K., 3269
Kogan, A., 4516
Kogan, J. M., 4115
Kohler, F., 294
Kohler, H. M., 2330
Köhler, W., 3079
Kohler, W., 3079
Kohn, H. A., 1696, 6594, 6691
Kohts, N., 4424
Kok, D. J., 3317
Kohler, W., 3079
Kohn, H. A., 1596, 6594, 6691
Kohts, N., 4424
Kok, D. J., 3317
Kohler, W., 3079
Kohnem, B. G., 652
Kolmann, A., 4425
Kolmer, H., 4748
Kolodziejczyk, S., 2731
Kometiani, P., 1305
Kometiani, P., 1305
Kometiani, P., 1305
Kometiani, P., 1305
Konorski, J., 3949
Konorski, J., 1967
Kopel, D., 3249
Kopp, H., 2017
Kopp, M. E., 4247, 4280
Korchin, B., 5892
Korcask, J., 1697
Korener, F., 6209
Korener, S. C., 3380
Kornia, G., 3603, 3645 5434 Kornis, G., 3603, 3645

Koramüller, A. E., 5695
Korsunaky, S. M., 4116
Korytowska, M., 913
Kosenko, S., 4783
Koshtojanz, C. H., 6255
Koshtoyanz, H. S., 4518
Köst, H., 4117
Koster, S., 833
Kostina, E., 4569
Kostitach, M., 5768
Kotowski, P., 3353
Kotsovsky, D. A., 4474, 4702
Koulik, D. M., 4118
Koura, I., 5045
Kouretas, D., 6420
Kovarsky, V., 101
Kovirev, J., 4519
Kovsharova, T. V., 1362
Koziol, H., 6512
Krahl, A., 2980
Kraines, S. H., 408, 5811
Kramer, G., 3646
Krampf, A., 525
Krampflitechek, H., 6130
Krantz, H., 5516
Kranz, J., 3839
Kraff, E., 3548
Krarup, N. B., 4695, 4696
Kraskin, L. H., 3381, 3895
Krann, M., 683, 778, 2376
Kranse, R., 4784
Krause, L. S., 1306
Krause, R. H., 4475
Krause, R. H., 1075, 2868, 2869
S175
Kreezer, G., 62, 211, 1076, 2301, 3549 Kreezer, G., 62, 211, 1076, 2301, 3549 3549
Kregelmass, I. N., 2981
Kreht, H., 63
Kreienberg, W., 4119
Kreindler, A., 3556, 5704, 6334
Kreipe, K., 5975
Kreipke, K., 923
Krekeler, —, 471
Krencker, H., 6329
Kreschmer, E., 834, 835, 836, 1930, 44120 Kretschmer, E., 834, 835, 836, 1930, 4120
Kreutz, M., 6163
Kreuzeder, R., 3840
Krikorian, Y. H., 3270
Krimsky, E., 3800
Kris, E., 4055
Kroeber-Keneth, L., 2606, 6018
Krogh, A., 2357, 2358, 2359
Kroh, O., 607, 4476
Kroiss, K., 5769
Kroll, A., 347
Kronfeld, A., 1931
Krout, M. H., 1546, 4121
Krueger, F., 770, 3466
Krug, J., 472
Krug, O., 5978
Krüger-Thiemer, O. F., 5281
Krüger-Thiemer, O. F., 5281
Krüger-Thiemer, O. F., 5281
Kruuhols, L. E., 2693
Krüger-Thiemer, O. F., 5281
Kruuhols, L. E., 2693
Krüger-Thiemer, O. F., 5281
Krube, L. S., 1363
Kube, L. S., 1363
Kubis, F., 175
Kubis, J. F., 3500
Kubo, Y., 4889, 5046
Kuckuk, E., 2338
Kuckulies, G., 3396
Kuder, G. F., 34, 2152
Kuenburg, M. v., 6513
Kuensel, M. W., 3550
Kugelmass, I. N., 1429
Kujath, G., 5942
Kumpl, K., 3246
Künkele, P., 1547, 5001
Künstle, P., 1547, 5001
Künstle, G., 3435
Kuns, K., 1430
Küncle, H., 1451
Kuo, H. H., 1698
Kuo, Z. Y., 176, 177, 585, 586, 1022, 2010, 4012
Kupalov, P. S., 4520 4120 Kreutz, M., 6163

Kupfe Kupk; Küppe Kurais Kuri, Kurta, Kurta, Kurtz, Kurtz, Kurtz, Kuste, Kuste,

Kwiek
Laase,
Lachat
Lachm
Lack,
Ladam
Lafont
Laforg
Lagach
Lahdet
Lahdet
Lahy,
Lahy,
Laidlat
Laigne
Laigne
Laird,

Lake, Lalich

ambe

Lambe

Lamp, Lampl, Lampl Lamson Lancas Landes Landis Landis Landis Landko Landm Lane, I Lang. l Lang, I Lang. Lange, Langen Langfe Langfe Langka Langlie Langwe Lantoc Lapicq LaPien Lark-H Larrabe Larsen. Larson, asarev Lasch. Lashley

Latham
Laubecl
Lauer,
Lauer,
Laugier
Lavallé
Lawe,
Lawer,
Lawor,
Lawson

Lasker,

Kupfer, E., 3897 Kupky, O., 980, 5436 Kūppers, J., 1432 Kuraisi, S., 3421 Kuriyama, Y., 1811 Kuroda, R., 694, 725 Kuroki, S., 695, 6514 Kurt, V., 526 Kurtz, J. I., 1932, 3382, 3898 Kurtz, R., 4871 Kurtzawski, S., 4427 Kusters, W., 1433 Kuvatov, G. G., 4572 Kuznetsov, V. P., 4521, 4785 Kwalwasser, J., 3647, 3648 Kwiek, M., 5176

Laase, L. T., 2019 Lachaud, R. de, 6217 Lachman, S. E., 4415 Lack, E., 3769 Lack, E., 3769
Ladame, —, 3271
Ladon, A., 5943
Lafort, J., 5421, 6422
Laforgue, R., 258, 5282
Lagache, D., 6515
Lahdensuu, S., 296
Lahey, M. F. L., 1857
Lahy, B., 920
Lahy, J. M., 35, 924, 1608, 5563, 5818
Laidlaw, R. W., 5770, 5771, 5772
Laignel-Lawastine, M., 2459
Laird, D. A., 1699, 4013
Laird, I. M., 4122
Lake, C. H., 3179
Lalich, J., 2373
Lambert, E., 4703
Lambert, E., 4703
Lambert, E., 4703
Lambert, E., 4890
Lampl H., 2249
Lampl de Groot, J., 2416
Lamson, C. S., 4786
Lamon, E. E., 3950
Lancaster, W. B., 223
Landes, R., 3649, 5342
Landis, C., 314, 771, 772, 4009, 5944
Landis, J. T., 6019
Landkof, B. L., 5343, 5344
Landmark, J., 3801
Landshery, P. L., 609
Lang, H. S., 3899
Lane, H. S., 3899
Lane, W. D., 2590
Lang, F., 2460
Lang, J., 5345
Lang, L., W., 3080
Lang, J., 5345
Lang, L., W., 3080
Lang, T., 2461
Langdon, J. N., 497
Lange, J., 473, 5346, 5485, 5866
Langenbeck, B., 3802, 5177
Langfeld, H. S., 1024, 3272
Langfeld, H. S., 1024, 327 Lasker, B., 4249
Lasker, B., 4249
Lasvell, H. D., 861, 1364, 4123, 4891, 6364
Latham, A. D., 4124
Laubscher, B. J. F., 3651
Lauer, A. R., 2224, 3702, 4308, 6101
Lauer, H. E., 2554
Laugier, H., 654, 2607
Laval, J., 5178
Lavallée, G., 2118
Law, F. W., 3900
Lawe, F. W., 3143
Lawlor, G. W., 103
Lawlor, G. W., 103
Lawlor, H., 655
Lawson, J. V., 947

Lawton, G., 5867, 6330 Lay, R., 4787 Laycock, S. R., 2634 Layman, E. McC., 1485 Layne, J. A., 3349 Lazarsfeld, P., 3081 Lazarsfeld, P., 4865 Lazarsfeld, P. F., 4865
Leach, J., 3247
Leach, J. M., 4429
Learned, J., 3242
Learned, W. S., 4357
Leary, T., 5347
Lebedinskaja, S. J., 1077
Lebedinskaja, S. J., 1077
Lebedinski, M. S., 4125
Leblond, C. P., 773, 1307, 3467
Leconte du Noûy, P., 610
Leconte, M., 5653, 5945
Leconte, S., 6431
Leconte-Lorsignol, S., 6131
Leconte-Lorsignol, S. Ledeboer van Westerhoven, L. F., 6516
Ledent, R., 2504
Lederer, L. G., 4587
Ledermann, W., 36, 5654
Ledingham, J., 5132
Lee, D. D., 2555
Lee, H. N., 4250
Lee, E. J., Jr., 2982
Lee, J. M., 2119
Leese, C. E., 774
Leeuwe, J. de, 2020
Leffmann, H., 2980
Legendre, R., 2778
Le Grand, Y., 104, 105, 696, 697
Lehman, H. C., 1700
Lehmann, —, 3125
Lehmann, —, 3125
Lehmann, —, 3125
Lehmann, —, 3164, 4704, 5868, 5869, 5870

Lewis, W. H., Jr., 2912 Lewitow, —, 491 Ley, A., 299, 6423 Ley, J., 5349 Lhermitte, J., 300, 775, 2986, 2987, 3553, 5773, 6517 Lhermitte, M. J., 2988 Liberson, W., 631, 654, 2260, 2773, 4677, 4707 Libet, B., 5699 Lichte, H., 3353 Lichtenstein, A., 6518, 6627 Liberson, W., 631, 654, 2260, 2773, 4677, 4707
Libet, B., 5699
Lichte, H., 3353
Lichtenstein, M., 5048
Lichtenstein, M., 5048
Lichtenstein, M., 5048
Lichtenstein, M., 5048
Lichtenstein, M., 4747
Liddell, E. G. T., 224
Liddell, H. S., 838, 5350
Liderman, M. J., 1309
Liebert, E., 4001
Liebig, M., 1486
Lientseng, W., 6519
Likert, R., 5448
Likhatchoff, V., 2080
Lilienthal, J. L., Jr., 5700
Liljestrand, G., 4708
Lim, R. K. S., 200, 1744, 1745, 1746, 1747, 1892
Lima, A., 6132
Lind, A. W., 3652
Lindberg, A. A., 3841
Lindberg, B. J., 5179
Lindesmith, A. R., 2989, 6564
Lindley, S. B., 2277
Lindner, F., 301
Lindner, F., 301
Lindner, R., 1304
Lindner, R., 1304
Lindner, R., 1394
Lindsay, J. R., 2820
Lindsay, J. R., 2820
Lindsay, M., 2902
Lindsey, M., 2903
Liddel, M., 2903
L

Litvak, L. B., 4015, 4017, 4018, 4127
Livanov, M. N., 4522
Liveany, T. M., 2663
Lloyd, D. P. C., 2779, 5687, 6211
Lloyd-Jones, E. McD., 6102
L. N., 2608
Lobov, L. P., 4793
Lochhead, J. H., 1874
Locke, E. S., 3952
Locke, N. M., 3902, 3933, 5774, 5775
Loder, J. E., 2120
Loebe, C. V., 6520
Loewing, W. F., 2823
Loewenstein, R., 269, 2417
Loftus, J., 4838 Loewenstein, R., 269, 2417 Loftus, J., 4838 Loftus, J. E., 3273 Loftus, J. J., 2122, 3180 Lohde, R., 5655 Lohmann, J., 3856 Lombardi, G., 3679 Lomboroso Ferrero, G., 5656 Lomont, A., 6628 Lomont, A., 6628 London, L. S., 2939 Long, J. A., 537 Long, L., 178

Longmire, W. P., Jr., 657 Longmuir, J. B., 5518 Longo, V., 3383 Longwell, S. G., 1397, 3953 Loo, Y. T., 1748, 1763 Loofbourow, G. C., 4365 Loomba, R. M., 6521 Lorand, S., 839, 1365 Lorad, S., 839, 1365 Lord, E., 5311 Lord, E. E., 4360 Lorente de Nó, R., 2780, 2824, 5133, 5134, 5135 Lorenz, K., 1875, 6331 Lorenz, K., 1875, 6331 Lorenz, K., 1875, 6331 Lorenz, I., 350, 411, 2096, 4639, 4893, 5098 Lorens, K., 1875, 6331
Lorge, I., 350, 411, 2096, 4639, 4893, 5098
Loring, J. C. G., 2302
Lossagk, H., 3703
Lottier, S., 5487
Lottig, H., 1310
Loucka, R. B., 1225, 1226, 3954, 3955
Lough, O. M., 179, 727
Louttit, C. M., 225, 2226
Low, A. A., 6133
Low, B., 5049
Low, H. R., 5604
Low, M. B., 982
Löwenberg, H., 3384
Löwenstein, O., 351, 4573
Lowery, H., 2825
Lowie, R. H., 412
Lowery, L. G., 6681
Löwy, I., 840
Löwy, I., 840
Löwy, S., 6365
Lu, T. W., 1775, 1845
Lubeen, N., 1311
Lucas, D. B., 3145
Luck, R., 2557
Luckieah, M. W., 4574
Luckwill, L. C., 2669
Luco, J. V., 1080, 2382
Lucaynska, H., 1155
Ludany, G., 1782
Ludderits, H., 5438 Luco, J. V., 1080, 2382
Lucaynska, H., 1155
Ludany, G., 1782
Lüderitz, H., 5438
Ludvigh, E., 6256
Ludwisch, D., 1242
Luff, M. C., 2378
Luft, U. C., 1312
Luh, C. W., 1657, 3422
Lukas, J., 5439
Luker, L. J., 2121
Lullies, H., 1764, 3844
Lumer, H., 3220
Lundolm, H., 4019, 5440
Lunguler, G. A., 413, 4894, 6021
Lundholm, H., 4019, 5440
Lunguler, G. A., 457
Lungwitz, H., 5284
Lungwitz, W., 6212
Luntz, A., 4575
Lupulescu, I., 3556
Lurie, L. A., 6332
Lurie, W. A., 1550, 3083, 4895
Luxenburger, H., 302, 2990, 2991
Lyman, R. L., 3174
Lyman, R. S., 2512
Lynn, D. R., 5871
Lythgoe, R. H., 2826
Lythgoe, R. J., 1106, 5776
Lythe, C. W., 3704
Maack, A., 3084

Lytle, C. W., 3704

Maack, A., 3084

Maaske, C. A., 778, 2376, 5702

Maberly, A., 39

MacArthur, J. W., 1702

MacCalman, D. R., 5605

MacCormick, A. H., 3126

MacCormick, A. H., 3126

MacCorne, I. D., 2558

MacCorne, I. D., 2558

MacDonald, T. H., 6076

MacDonald, M. W., 4205

Mace, C. A., 2940

Machemer, H., 1156

Machausen, M., 2227

MacIntosh, F. C., 3845, 5703

MacIntyre, E. M., 3554

MacKinnon, D. W., 2505

Macklin, M. T., 6424

MacLagan, D. S., 1551

Maclagan, D. S., 1551

Maclagy, W. S., 283

MacLeod, W. C., 476

MacMurray, D., 1658

MacPherson, H. S., 1595

Macyaugh, G. S., 6670
Macy, J. G., 5608
Madden, M., 4979
Maddox, J., 5441
Madigan, L. F., 80
Madigan, M. E., 6116
Madison, T., 5565
Madison, H., 4130
Madow, W. G., 2732
Magdaick, W. K., 5205
Magee, C., 1313
Maggia, O., 1624
Magitot, A., 1814, 2827, 3385
Magnotti, T., 1314
Magoun, H. W., 658, 2°13, 3325, 5136, 5691
Maier, N. R. F., 65, 180, 1227, 3956, 3957
Main, Z., 522, 948
Maiorov, F. D., 1303
Maison, G. L., 4876, 5180
Maiti, H. P., 1659
Major, C. L., 4361
Majorov, T. P., 4709
Majundar, D. N., 6522
Makarov, P., 5777
Makhdum, M. M., 3958
Malamud, W., 3352
Malanud, E., 7, 2021
Males, B., 5442
Males, B., 5442
Malespie, E., 4710
Malinowaki, A., 4309
Mall, G. D., 779, 2914
Maller, J. B., 1487, 5099
Mallet, D. R., 5382
Mallis, A., 6333
Malone, W. H., 1936
Malyarov, A. A., 4718
Malsberg, B., 3555, 5353, 5946
Mandelbaum, J., 6243
Manick, R., 5881
Mann, C. W., 414
Mann, I. C., 107
Mannelim, H., 6425
Mannhelmer, E., 5947
Mannelim, H., 6425
Mannhelmer, C. E., 1625, 5002
Mapother, E., 1937
Marcendes, D., 4794
Marchak, M. E., 5872
Marchal, P., 4577
Marchal, J. G., Jr., 5488
Marcus, G. F., 2559, 4896
Marcus, G. F., 2559, 4896
Marcus, R., 8228, 2229, 2506, 2334, 6426
Marinesco, G., 303, 3556, 5704, 6334, 6426
Marinesco, L., 1939 Marguglio, D., 1596
Marinesco, G., 303, 3556, 5704, 6334, 6426
Marinesco, J., 1939
Marinescu, G., 4711, 4949
Marker, F., 1488
Markey, O. B., 304
Markonyan, A., 4519
Markov, D. A., 3446, 4523
Markussewicz, R., 2418, 5285
Marlow, F. W., 3903
Marmont, G., 6335
Maroske, F., 352
Marquess, M. J., 990
Marquis, D. G., 305, 1228, 5705
Marrassi, A. S., 4524
Marrow, A. J., 6289, 6290
Marshall, C. R., 4020, 5778
Marshall, E. L., 983
Marshall, E. L., 983
Marshall, H. E., 40
Marshall, W., 6103
Marshall, W., 6103
Marshall, W., 6104
Marshall, W., 6105
Marshall, W., 6104
Marshall, W., 6104
Marshall, W., 6105
Mar

AUTHO.

| Martin, L. J., 6629 |
| Martin, L. R., 4479 |
| Martin, R. L., 4281 |
| Martin, R. L., 4281 |
| Martin, R. L., 4281 |
| Martin, S. J., 780 |
| Martinengo, V., 1451 |
| Mason, M. H., 299 |
| Marton, H., 170, 570 |
| Mason, M., 1674 |
| Mason, M., 1689 |
| Mason, M., 1680 |
| Mather, N., 6836 |
| Mather, K., 4085 |
| Mather, V. G., 4805 |
| Mathewa, C. O., 4641 |
| Mathon, R., 1908 |
| Matthews, M. T., 2022 |
| Matthews, M. T., 2022 |
| Matthews, M. T., 2022 |
| Matthews, M. H., 281 |
| Marthews, M. H., 281 |
| Marthews, M. H., 282 |
| Matthews, M. H., 283 |
| Mayer, J., 498 |
| Mayer, Gould, H., 5519 |
| Mayor's Committee for Selection of Suitable Books for Children in the Courts, 2023 |
| Mary, H., 4282 |
| Marurkiewics, J., 3423, 3847 |
| Mazzeo, M., 1703 |
| McCall, W. A., 514, 2122, 2636, |
| McCance, R. A., 2378 |
| McCann, W. S., 3588 |
| McCannellon, Martherent |
| Matherent | Martherent |
| Matherent | Matherent |
| Matherent | Mazreo, M., 1703
McCall. W. A., 514, 2122, 2636, McCall. W. A., 514, 2122, 2636, JIRO
McCance, R. A., 2378
McCann, W. S., 3558
McCarthy, D., 1660
McCarthy, E. F., 6256
McCarthy, E. F., 6256
McCartney, J. L. 1941, 2941
McCaskill, C. L., 6134
McClelland, E. S., 862
McClintock, J. A., 3730
McColl, I., 4796
McConnell, T. R., 6168
McCocy, M. J., 3680
McCord, C. P., 5183
McCormick, T. C., 5443
McCrady, B., Jr., 1815
McCraven, V. G., 5206
McCulloch, T. L., 226, 660, 1766, 3315, 5127, 5684, 6201
McDavid, N., 502
McDonald, K., 5581
McDonough, F. K., 5678
McDougall, W., 3959, 3960, 4206
McDowell, M. S., 3221
McElhinney, R. S., 2140
McFadden, F., 4899
McFadden, F., 4899
McFarland, M. B., 3222
McFarland, M. P., 2672
McFarland, M. P., 2672
McGehee, F., 1853
McGeoch, J. A., 182, 183, 1025, 3424, 5216
McGeraw, M., 2916
McGraw, M., 2916
McGraw, M., 2916
McGraw, M., B., 5249
McGregor, H. G., 307
McHugh, R. J., 6056
McHugh, W. H., 6135
McInnes, R. G., 842

McKay, A. T., 2734, 2735, 2736, 2737
McKay, E. B., 274
McKee, L., 3247
McKee, L., 3247
McKimens, D., 2994
McLaughlin, K. L., 5004
McLean, A. K., 801
McMurry, R. N., 2081, 4307, 4967
McNally, W. J., 1816
McNassor, D. J., 1609
McNeely, J. H., 6631
McNemar, Q., 3468
McPherson, G. E., 4337
McRae, D., 1438
McSpadden, W. W., 4330
McSwiney, B. A., 6213
Meacham, A. D., 3261
Mead, L. C., 108
Mead, M., 3087
Mebel, M., 4176
Meek, W. J., 2373, 2394
Meenea, M., 728
Meerloo, A. M., 1732, 1977, 2304
Meggendorfer, F., 3088
Mehlem, R., 530
Meier, N. C., 1554
Meierhofer, M. M., 2462
Meierhofer, M. M., 2462
Meierhofer, M. M., 2462
Meierhofer, M. M., 2461
Meiching, L., 5444
Mellanby, E., 6214
Mellanby, E., 6324
Menger, H., 4795
Menger, K., 4901
Menner, E., 109
Mennicke, C. A., 4252
Menninger, W. C., 843, 2996, 4133, 4134, 4796
Meredith, H. V., 3218, 5606, 6136 Menner, E., 199
Mennicke, C. A., 4252
Menninger, K. A., 611, 2061, 2995, 4132
Menninger, W. C., 843, 2996, 4133, 4134, 4796
Meredith, H. V., 3218, 5606, 6136
Merlam, J. L., 6633
Merlam, L., 2610
Merkel, F. W., 2917
Merker, E., 1158
Merrill, W. W., Jr., 2738
Merrill, W. W., Jr., 2738
Merryies, W. A., 5184
Mersand, J., 5445
Mersand, J., 5445
Mertena, H., 1683
Mertena, M., 2594
Messer, W. J., 5588
Messimy, R., 1767
Metcalf, H. C., 3147
Metcalf, H. C., 3147
Metcalf, H. G., 2261
Metcalf, J. T., 4902
Metcalf, J. T., 4902
Metcalf, E., 963
Mettler, F. A., 621, 1081, 1124
Metz, F. A., 621, 1081, 1124
Metz, F. R., 670, 5607
Meyer, F. M., 3559
Meyer, H. H., 1439
Meyer, R., 1704, 5607
Meyer, F. M., 3559
Meyer, H. H., 1877
Meyering, H. R., 2168
Meyerson, I., 3938
Miale, F. R., 6470, 6472
Miccino, E. E., 3560
Michaels, J. J., 6686
Michotte, A., 2230
Middleton, W. E., 8228
Mierke, K., 5389
Mies, H., 4021
Miklo, A., 5874
Miller, D. S., 2231
Miller, D. S., 2231
Miller, P. R., 2403
Miller, M. R., 997
Milici, P., 2998
Miller, W. R., 2997
Millici, P., 2998
Miller, W. R., 2997
Miller, M. R., 4903
Miller, D. S., 2231
Miller, R., 6137

Miller, S., 1223, 3949
Miller, W. A., 5005
Miller, W. O., 5191
Millett, R. L., 3111
Millichamp, D. A., 1670, 1671,
Mills, C. A., 3561
Mills, C. A., 3564
Mills, C. A., 3566
Millspaugh, J. A., 2463
Minday, B., 5608
Mink, P. J., 5185
Minkowaki, E., 110, 2999, 4797,
6428 6428 Minor-Záruba, E., 3771 Minot, A. S., 4135 Minaki, L., 333, 4798 Minut-Sorokhtina, C O. P., 3961, Minut-Sorokhtina, O. P., 3
3962, 3972
Mirelson, A., 4136
Miro, A. R., 3485
Miro, A. R., 3485
Miroglio, A., 1733
Mirskaya, M., 4137
Mirkovski, N. V., 4799
Mishchenko, M. N., 5251, 5354
Miskolexy, D., 3000
Minsiuro, V., 2918
Mitchell, A. J., 2024
Mitchell, G. E., 6077
Mitchell, J. H., 5223, 5524
Mitra, S. C., 1026, 3803
Mitrofan, E., 2445
Mittersuier, R., 229, 6338 Mittermaier, R., 229, 6338 Miura, M., 1942 Miya, K., 3569 Moede, W., 2232, 2611, 3148, 3149, 3387 Moede, W., 2232, 2611, 3148, 3
3387
Moglie, G., 1406
Mogracheva, R. L., 4826
Mohr, G., J., 5658
Mohr, G. J., 5658
Moir, H. C., 1818
Moldaver, J., 4525
Mollard, J., 4525
Mollinis, G., 1705
Molitch, M., 1706, 2871
Molitor, A., 3425
Mollaret, P., 661
Möller, J., 477
Molokhov, A. N., 4800
Mols, O., 3562
Mombert, P., 4904
Money-Kyrle, R. E., 417
Mones, L., 2123
Mombert, P., 4904
Monier, E., 310, 4801
Monjar, E., 546
Monnier, A. M., 3304, 6206
Monnier, M., 1768, 1819, 3605
Monnie, M., 2625, 3090
Monroe, M., 362
Monroe, M., 362
Monroe, W. S., 4363
Montassut, M., 3001
Monte, C. d., 3388
Montgomery, E., 3287
Montgomery, E., 3287 Montassut, M., 3001
Montassut, M., 3001
Montet, C. d., 3388
Montgomery, E., 3287
Montpellier, G. de, 1315, 5252
Moore, B. V., 6168
Moore, C. C., 531
Moore, C. E. A., 3091
Moore, H., 5525
Moore, J. E., 478, 1556, 2124, 2419, 2919, 3181, 5564
Moore, M., 1943, 2026, 4084, 5100
Moore, P., 2027
Moore, S. B., 6138
Moore, T. V., 3275, 4138
Moore, T. V., 3275, 4138
Moorthy, B. M. L., 1707
Morel, F., 3002
Moreno, J. L., 311, 418, 6023
Morgan, C. M., 1489
Morgan, C. T., 111
Morgan, L. O., 5137
Morgant, M. E., 4364
Morgentstern, S., 3223, 3502, 4430
Morgenthaler, W., 2464, 3003
Mort, K., 4578
Mortholer, W., 230
Morlson, R. S., 787, 1082, 1321, 2263
Morley, J., 1820
Morley, J., 1820
Morley, J., 1820
Morloyen, E. B., 492 Morley, J., 1820 Morones, E. B., 492 Morris, C. M., 1661

Morri Morri Morsi Mort Mort

Morto Morto Mosa Mose Mosie Mosk Moso

Moss. Most

Mosz

Moth

Mowii Mowii Mudr Muell Muen Muhli Muhli Muke Muke Mülle

Mülle Mülle Mülle Mülle Mulle

Mülle Mülle Mülle Mulli

Mulro Munc Munk Munk Munn Munn Munro Murdo Murdo

Murpl Murpl Murpl Murpl Murpl Murra Murra Murse Muste Muste Muste

Myasi

Myen Myera Myera Myhri Nachn Nachn Nacht Nadel. Nadole Nafe, Nagel, Nager. Nakan Nakan Nakay Nakay Narain Narika Narly, Narona Näser, Nash,

Nass, -

Morris, C. W., 2739
Morrison, N., 5098
Morrison, N., 5098
Morrow, R. S., 5025
Morsier, G. de, 6430
Mort, F. R., 2028
Mortischenja, A., 2390
Morton, L. T., 5526
Morton, N. W., 493, 6082
Mosak, J. L., 42
Moses, B. L., 231
Mosier, C. I., 2507, 3037, 3276
Moskowicx, L., 4022
Mosoiu, V., 6443
Moss, F. K., 4574
Mostler, G., 3426
Moszkowicz, L., 4022
Mosoiu, V., 6443
Moss, F. K., 4574
Mostler, G., 3426
Moszkowicz, L., 2920
Mothon., 679
Mowrer, H. R., 1232, 2233, 2339, 2356
Mowrer, W. M., 4431, 5758, 6687
Mowrer, W. M., 4431, 5758, 6687
Mowrer, W. M., 4431, 6687
Mudrow, L., 3732
Mueller, J. H., 5447
Muenzinger, K. F., 4642, 6291
Mugglin, F., 5780
Mühl-Kühner, R., 6591
Muhlmann, A., 419
Mukerjee, A. K., 1440
Mukerjee, A. K., 1440
Mukerjee, A. S253
Müller, F., 5819
Müller, J., 3283
Müller, L., 3469
Müller, J., 1733
Müller, L. R., 3469
Müller, H., 2903
Müller-Freienfels, R., 1558, 2829, 3182, 6024
Müller-Hegemann, D., 312
Müller-Welt, E., 3470 3182, 6024
Müller-Hegemann, D., 312
Müller-Weit, E., 3470
Mullin, F. J., 700
Mulroy, E. F., 1627
Muncie, W., 5948
Mündel, R., 5781
Munkra, A. 6130 Mündel, R., 5781 Munkres, A., 6139 Munn, N. L., 5101 Münnich, K., 1610 Munno, T. A., 4124 Murdock, G. P., 420, 6526 Murlee, --, 6431 Murphy, F. E., 2129 Murphy, G., 43, 421, 1490, 3503, 5448 Murphy, F. E., 2129
Murphy, F. E., 2129
Murphy, G., 43, 421, 1490, 3503,
5448
Murphy, J. F., 1708
Murphy, P., 3004
Murphy, P., 3004
Murphy, W. C., 6565
Murray, E. P., 3653
Murray, H. A., 864
Mursell, J. L., 532, 1559, 2029, 5565
Muster, D., 2637
Muster, D., 6025, 6634
Musylev, F. J., 1159
Myasishchev, V. N., 4139
Myers, C. E., 4365
Myers, C. E., 4365
Myers, C. S., 2612, 3150, 3471,
5527, 5566
Myers, G. C., 1234
Myerson, A., 3848, 4802
Myhrman, G., 1316

71,

97.

51,

Myhrman, G., 1316

Nachmansohn, D., 5708

Nachmansohn, M., 3472

Nacht, S., 2942

Nadel, A. B., 355

Nadel, S. F., 422

Nadelecxny, M., 5102, 6026

Naerebout, A., 5262

Nafe, J. P., 1821, 1822, 1823, 2305, 3064

Nagel, V., 2564

Nagel, V., 2564

Nager, F. R., 112

Nakamira, N., 1824

Nakanishi, M., 1878

Nakayama, T., 3277

Narain, R., 4023, 4058

Narikashvili, S., 1050, 1051, 1052, 1083

Narly, C., 2638, 2639, 2640

Naronak, D., 1235

Naser, E., 5341

Nash, E. A., 1494

Nasa, —, 5528

National Industrial Conference

Board, 6078

Naumann, I., 1628 Navarro, A., 1367 Nayami, H., 5889 Nayrac, P., 3849 Nayuda, P. S., 1027 Needham, J., 1734 Neele, E., 4140 Needham, J., 1734
Neele, E., 4140
Neele, E., 4140
Nekrassov, P., 4730
Nelli, G., 3681
Nelson, B., 4803
Nelson, W. B., 773
Nelson, W. D., 773
Nelson, W. O., 1307
Nemtzowa, O. Z., 2379
Nemzek, C. L., 2650
Neron, G., 2171
Ness, A., 3654, 5103
Nestele, A., 313
Nestele, A., 313
Nestele, A., 313
Nestor, I. M., 2641, 4480, 5026, 5217, 6079, 6635
Netzer, R. F., 2125
Neubauer, V., 6592
Neubaus, W., 701, 1826, 5050
Neujahr, H., 232
Neubaus, W., 701, 1826, 5050
Neujahr, H., 237
Newberry, H., 5614, 5615
Nevcomb, T., 2555, 3092
Newcomb, T., 2555, 3092
Newcomb, T., 3613, 2830, 3151
Newhart, H., 5782
New Jersey Secondary School
Teachers Association, 4366

Newcomb, T. M., 421, 423, 6527
Newhall, S. M., 2613, 2830, 3151
Newhalt, H., 5782
New Jersey Secondary School
Teacher Association, 4366
Newland, T. E., 2126, 2127
Newlee, C. E., 2306
Newman, H., 2921
Newman, S., 4805
Newman, W. L., 1336
Newstetter, W. I., 6527
Neyman, J., 3278
Niccoforo, A., 3804, 4481, 4482
Nichols, F. G., 5567
Nichols, I. C., 4778
Nicholson, H. C., 662, 5709
Niccolai, N., 1401
Niederhöffer, E. v., 2642
Nielsen, H. E., 2360
Nielsen, H. E., 2360
Nielsen, M., 4483, 5254
Niessing, K., 6257
Nifenecker, E. A., 3183
Nihard, R., 2170, 2643
Nikiforovski, V. M., 4579
Nims, L. F., 6201
Nindel, E., 113
Nishida, T., 988
Nissen, H. W., 156, 718
Nobel, W., 1944
Noble, G. K., 2831
Nobel, W., 1944
Noble, G. K., 2831
Nomura, T., 1861
Nomura, T., 1861
Nomura, T., 1861
Nomura, R., 240, 5932
Norris, D. E., 3224
Nordgren, G., 2307
Norman, R. M., 4260, 5932
Norris, D. E., 3224
Northington, P., 2380
Northington, P., 2380
Northington, P., 2380
Northington, P., 2380
Northington, P., 2390
Northington, P., 2390
Northington, P., 2300
Northington, P.,

Oakley, C. A., 5568 Oberlin, D. S., 5609 Oberly, H. S., 5659 Obonal, T., 1827 Obrador, S., 1099 Obregin, A., 2465, 2466, 2467, 2468 O'Brien, F. J., 4367 O'Brien, J., 989 Obst. J., 4905 Ochiai, Y., 3389

O'Connor, J., 2644, 3755, 4906, 5027, 5589, 5590
O'Connor, Z. C., 1596, 6688
O'Day, K., 4580, 6258
O'Donnor, J. C., 3963
O'Connor, J. C., 3963
O'Connor, J. C., 3963
O'Connor, J. C., 469
O'Donnell, C. M., 1028
O'Connord, W., 5104
O'Connord, W., 5104
O'Connord, W., 5104
O'Connord, W., 5104
O'Connord, J. C., 5259, 6260
O'Connord, C., 5259, 6260
O'Connord, C., 5207
O'Connord, J. C., 5259
O'Connord, J. J., 526, 4806
O'Connord, J. J., 526, 4806
O'Connord, J. J., 526, 527
O'Connord, J. J., 5365
O'Neill, H. O., 2872
Ond, M., 5138
O'Neill, F. J., 5365
O'Neill, F. J., 5365
O'Neill, F. J., 5365
O'Neill, H. O., 2872
Ond, M., 5138
O'Neill, F. J., 5365
O'Neill, F. J., 5365
O'Neill, H. O., 2872
Ond, M., 5138
O'Neill, F. J., 5365
O'Neill, F. J., 5365
O'Neill, H. O., 2872
Ond, M., 5138
O'Neill, F. J., 5365
O'Neill, H. O., 2872
Ond, M., 5138
O'Connord, J. L., 4526, 427, 3656, 5450
O'Connord, J. L., 4525
O'Connord, J. L., 5358
O'Connord, J. L., 4525
O'Connord, J. L., 5358
O

Ortmann, O., 425, 426, 427, 3656, 5450
Ortner, A., 1237
Orton, J. L., 4253
Osborn, A. S., 6528
Osborn, C. M., 3474
Osborn, F., 428, 2566
Osborn, R., 3093
Osborne, E., 2186
Osborne, E., 2186
Osborne, E., 2186
Osborne, W. Q., 2129
Oseretzky, N., 3564
Osipov, V. P., 4145
Ostenfeld, I., 844
Ostenfeld, I., 844
Ostensek, F. J., 5700
Ottis, A. S., 555, 5660, 5661
Ottestad, P., 4484
Outland, G. E., 951, 3094, 3657, 5051
Overholser, W., 3128, 5489
Overn, A. V., 2130
Owen, M. B., 2592
Oxley, H. W., 6636

Pace, C. R., 952, 1561 Page, I. H., 1085 Page, J., 314, 3565 Paget, R. A. S., 2567 Pal, T., 2512 Pailthorpe, G. W., 4739 Paine, D. R., 1829 Painely, J. W., 534 Pajak, J., 4146 Pajowa, E., 3225 Pal, G., 1160, 3905 Pallister, H., 1491

Pallister, H., 1491 Palmer, C. E., 1830, 5784, 6129 Palmer, H. D., 4403, 5937 Palmer, M. F., 4907

Palopoll, N., 3280
Panara, C., 1442
Panconcelli-Calzia, G., 1562
Pancratz, D. S., 990
Pangburn, W. W., 450
Pannier, M. R., 129
Pantchenko, D. J., 4024
Pantin, C. F. A., 4025, 4712
Papez, J. W., 5876
Papke, H., 2470
Parcheminey, G., 3507, 6433
Parfitt, D. N., 6434
Park, W. Z., 6027
Parker, E. P., 3174
Parker, F. W., 535
Parker, G. H., 1769, 1770, 4713
Parmenter, R., 838
Parr, F. W., 1611
Parratt, S., 2056
Parratt, S. D., 4284
Partridge, E. D., 6689
Partridge, E. D., 6689
Partridge, E. J., 3226
Partridge, P. H., 2568
Partridge, P. H., 2568
Parvela, L., 6325
Paskind, H., 3574
Pasteels, J., 2704
Pataky, J., 462
Patek, A. J., 4560
Paterson, D. G., 1029, 2131, 2234
Patini, E., 3129, 3682
Pattin, E., 3129, 3682
Pattin, E., 3129, 3682
Pattin, E., 3129, 3682
Patten, E. F., 4644
Patterson, M., 1390
Pátzay-Liebermann, L., 3658
Paul, J. B., 1630
Paul, B., 1630
Paul, R., 6529
Paul, R. L., 2569
Paul, R. L., 2569
Paul, R. L., 2433 Paul, R. I., 2569
Paul-Boncour, G., 2171
Pauli, R., 4485
Pauls, T., 4433
Paulsen, L., 3039
Pavan, A., 1631, 6637, 6638
Pavelcu, V., 2645, 4714, 4715, 6475
Pavlov, I. P., 1238
Pavlova, A. M., 3428
Pavlovaki, A., 4645
Pavlovaki, I., 5, 3566
Pawlowski, L., 4254
Pax, W. T., 3964
Payne, E. G., 6550
Peak, H., 1319
Pear, T. H., 729, 1991, 6339
Pearl, R., 2922, 4716
Pearson, E. S., 2737, 2740
Pearson, K., 2741, 2742, 2743, 2744, 2745, 2746, 2747
Peane, M. C., 3227
Peatman, J. G., 1030, 6690
Pechstein, L. A., 1239
Peck, L., 730, 1563
Peck, M., 5286
Pedersen, V. C., 783
Peck, R. L., Jr., 44
Peekel, G., 6028
Pegram, M. H., 3506
Peiper, A., 2172, 2173, 3228, 3229, 4434, 4435
Peitxmeier, J., 1879
Pell, O., 4486 Paul-Boncour, G., 2171

4434, 4435
Peitzmeier, J., 1879
Pell, O., 4486
Pelwijk, J. J. ter, 3659
Penfield, W., 5711
Pennington, L. A., 1240, 2832
Pentreath, E. U. H., 315
Pentsik, A. S., 3842
Pepper, S. C., 613, 4255
Perelman, A. A., 4148, 4807
Perelmutter, E. A., 4149, 4171
Peretti, G., 6340
Perlman, H. B., 2820
Perlman, H. G., 693
Pern. S., 6215 Perlman, H. Gr., 995 Pern, S., 6215 Perlo, V., 2748 Peron, N., 1947 Personnel Research 4310, 4968 4310, 4968 Persons, G. L., 505 Peskin, J. C., 689 Petermann, B., 1564 Peters, C. C., 6639 Peters, H., 3475 Peters, H. N., 234, 1320, 5877 Peterson, C. M., 3327 Peterson, T. J., 4436

Pető, E., 4437
Petrén, A., 4150
Petrén, T., 1880
Petrescu, N., 4487
Petrie, A. A. W., 4898
Petrov, I. R., 1881
Petrova, A. P., 4151
Petrova, M. K., 3429, 3435, 3567, 3568, 3569, 3570, 3571, 3572, 3568, 3569, 3570, 3571, 3572, 3573, 4646
Petrova, N. G., 4522
Petrow, B. B., 2614
Pesard, A., 1882
Pfister, A., 4717
Pfister-Amende, M., 3683
Philip, B. R., 2308, 3906
Philip, R. R., 2585
Phillips, H. C., 1241
Phillips, L. R., 2826
Phillips, L. R., 2826
Phillips, M., 991
Phillips, R. A., 690
Phillips, R. A., 690
Phillips, L. G., 3430
Pichon, E., 429, 3095, 3507
Pichele, E. G., 3883
Pickford, R. W., 3965
Pickworth, F. A., 2923
Piddington, M., 235
Pierce, A. E., 4330
Pierce, W. O'D., 1491
Piéron, H., 2833, 2834, 2873, 3392, 4027, 5878
Pieter, J., 3966
Pigors, P., 2082
Pike, F. H., 604
Piker, P., 5786, 5952
Pikler, J., 3436
Pilca, A., 6438
Pilgram, J., 5218
Pillsbury, W. R., 5106
Pines, G., 994
Pinkerton, J. D., 2265
Pintner, R., 1662, 2030, 3040, 4207, 4838, 4839
Piotrowski, Z., 356, 357, 865, 1443, 1444, 1492, 3041, 3042, 3198, 4208, 6476 Pető, E., 4437 4838, 4839 Piotrowski, Z., 356, 357, 865, 1443, 1444, 1492, 3041, 3042, 3198, 4208, 6476 1444, 1492, 3041, 3042, 314
4208, 6476
Pirilä, V., 6298
Pisk, G., 316
Pitsch, F. W., 6439
Pizzagalli, A. M., 4908
Planelles, J., 1242
Plant, J. S., 3006
Plate, L., 5219
Platonova, E., 3907
Plesso, G., 4718, 4719
Pletnjev, A. W., 3393
Plewa, F., 614
Plotnikowa, O., 3225
Podkopaev, N. A., 4648
Podolsky, E., 4152
Poflenberger, A. T., 2340, 2615
Pohlisch, K., 6440
Pohlman, A. G., 4582
Poignard, M., 2646
Pojoga, N., 5007, 6593
Polimanti, O., 4028
Politaer, M., 1883
Pollack, B., 1445, 5953
Pollens, B., 6567
Pollnow, H., 5662
Pollock, L. J., 5186
Poltyreff, S. S., 2341, 2342, 2343
Polyogt, L. M., 3908
Ponce, A., 5610
Pontrelli, E., 5501 Poltyren, S. C., 3908
Ponce, A., 5610
Ponce, A., 5610
Pontrelli, E., 5501
Ponso, M., 2924, 4488, 4720, 6640
Poole, H. H., 3858
Poole, M. W., 5608
Popea, A., 2471
Popenoe, P., 431, 2570, 2571, 2874, 6530
Popesu-Sibiu, I., 4811, 6531
Popof, W. W., 4721
Popor, E. A., 4153
Popov, E. A., 4153
Popovic, N., 4740
Popovici, I., 5007
Popovici, I., 5007
Popovici, L., 5007
Popovici, S., 2647

AUTHOI

Poppi, U., 1446
Porkielje, A. F., 5235
Portenier, L., 6641
Portenier, L. G., 2174, 4370
Porter, E. H., Jr., 3967
Porter, E. H., Jr., 3967
Porter, E. H., Jr., 3967
Porter, E. L., 184
Porter, J. M., Jr., 184
Porter, J. M., Jr., 184
Porter, J. M., Jr., 184
Porter, J. P., 2137, 3281
Porternann, F., 6029
Posisoeva, E. A., 3962
Posvyansky, P. B., 4154
Potter, G. L., 2648
Potter, H. W., 3230, 5954
Pötzi, O., 3372, 3373, 3884, 4163, 6245
Poull, L. E., 1429, 2981, 5611
Powell, N. J., 2063
Powers, E. 3096
Powers, F. F., 4217, 6168, 6642
Powers, F. F., 4217, 6168, 6642
Powers, S. R., 5571
Poznanski, A. S., 5354
Prang, S. E. v., 2572
Prak, J. L., 3097
Prall, D. W., 2749
Prankerd, L. T., 4583
Pratt, C. C., 1510, 4257
Pratt, J. G., 1370, 3508, 3909, 5287
Pratt, J. G., 1370, 3508, 3909, 5287
Pratt, M., 4979
Pratt, M., 4979
Pratt, M., 4550
Preda, G., 4812, 4813, 5028, 6441, 642, 6443, 6552
Prescott, C. H., 6169
Prescott, C. H., 6169
Prescott, C. H., 6169
Prescott, D. A., 3734
Preston, M. G., 1217, 3394, 4909
Preyer, W., 2925
Pribytkova, G. N., 5220, 5221
Price, H., 2420, 6030
Price, J. B., 1771
Price, M. M., 5287
Prince, M., 6444
Prindiville, J. V., 6104
Privat de Fortunié, —, 3007
Proffitt, M. M., 3193, 5013, 6666
Propper, N., 3831
Propper, Grastchenkov, N. J., 4584
Prosokauer, G., 432
Protopopov, V. P., 5359, 5360 Propper-Graatchenkov, N. J., 45
Prorokov, I. R., 465
Proskauer, G., 432
Protopopov, V. P., 5359, 5360
Prosker, C. L., 785, 6216
Prudhomme, C., 6031
Psychological Corporation, 2084
Puca, A., 5361, 6170
Pugh, B. M., 4353
Pugliese, A., 3476
Pullias, E. V., 895
Punke, H. H., 6105
Pupilli, G., 4527
Putnam, T. J., 1447, 5222
Putse, L. M., 2085 Quadíasel, F. A., 2835 Quaid, T. D. D., 6106 Quai, A., 5257 Queen, S. A., 3056 Quercy, P., 845, 6217 Quick, W. R., 3152 Quilliam, J. P., 5776 Quinan, C., 2573 Quinan, C., 2573

Rabaud, E., 433, 3098, 3805, 5258

Rabe, J., 5052

Rabkin, E. B., 115

Race, H. V., 3735

Radous, E., 2593

Radakovic, K., 2031

Rademaker, G. G. J., 3336, 5139

Radin, P., 434, 435

Radovici, A., 3008

Raduleacu-Motru, C., 4585, 4969

Raekallio, T., 6298

Ragsdale, C. B., 5555

Ragsum, T. J., 45

Rahm, J., 5612

Raible, M., 5293

Raiford, T. E., 5608

Rainey, H. P., 3184

Raithel, W., 1448

Rakhman, D. J., 4155
Ram, P., 1632
Ramberg, H., 5879
Ramer, T., 1949, 2175, 2472
Ramsperger, A. G., 2750
Ramul, K., 2132
Ranck, K. H., 4229
Rand, G., 1128, 2075, 3138, 6580
Raney, E. T., 67
Ranitzsch, S., 6032
Rank, B. T., 5613
Ranke, O. F., 5259
Ranson, S. W., 658, 3325, 5136, 5691 Ranson, S. 5691 5691
Ranulf, S., 4258
Rao, K. G. R., 4392
Rao, N. J., 4393
Raphael, T., 2133
Raphael, W., 3143, 4814, 5529, 6080
Raptschinsky, B., 1565
Rashevsky, N., 1859, 5663
Raskin, E., 1522, 4910
Raths, L., 4372
Raths, L., 4372
Raths, L., 4372
Raths, E., 568
Ravn, J., 4156
Rawdon-Smith, A. F., 2286, 3879
Rayleigh, Lord, 6261, 6367, 6368
Raynaud, A., 6341
Rayner, L., 3287
Rasran, G. H. S., 185
Read, C. B., 2649, 6645
Reager, E. F., 866, 3231
Reboud, R., 6033
Rechetnick, J., 3180
Recklens, W. C., 1449, 2062
Recu, S., 2134
Redcay, E. E., 5008
Reddick, V. S., 6658
Redd, F., 6156
Reed, H. B., 3736
Reee, J. R., 1388
Reee, H., 3574
Reveve, D. L., 1816
Regelsberger, H., 2381
Rehn, E., 1450
Reich, W., 615, 786, 3282
Reichard, G. A., 436
Reichelt, E., 5188
Reid, A. C., 5664
Reider, N., 4157
Reifenstein, E. C., 5362
Reich, W., 615, 786, 3282
Reichard, G. A., 4911
Reiner, R. C., 2574
Reinhardt, E., 5368
Reinhardt, J. M., 4259
Reinhold, J., 5363
Reinser, H., 617
Reiser, C. L., 5107
Reisner, H., 2616
Reise, M., 2322
Reistrup, H., 2473
Remmers, H., 4003
Remmers, H., 3997
Remmers, H., 3997
Remmers, H., 3997
Remmers, H., 3997
Remmers, H., 5000 Remmers, H. H., 3043, 5029, 5572, 5070
Remmlein, M. K., 6533
Rempel, B., 636
Rensch, B., 2875
Renshaw, B., 636
Renschw, S., 1016, 2876
Renshaw, S., 1016, 2876
Renslaw, S., 1016, 2876
Reschke, H., 5452
Reuter, E. B., 2176
Révész, G., 3397, 3910
Rexroad, C. N., 3283
Reymort, M. L., 6594, 6691
Reynolds, C. N., 2543
Reynolds, F. E., 949
Reynolds, W. R., 1233
Rezmikoff, L., 3575
Rhine, J. B., 3509, 3510, 3511, 4059, 4060, 5288, 5289
Rhodes, A., 3099

Rhodes, A., 3099

Rhodes, L. K., 494 Ribaud, G., 4586 Ribero, L., 480 Ribsskog, B., 4374 Ribaskog, B., 4574
Ricci, A., 3660
Rice, M. B., 1493
Richard, A., 6218
Richard, A., 6218
Richard, C., 2575
Richards, L., 6291
Richards, L., 6291
Richards, T. W., 2177, 5614, 5615
Richardson, L. F., 236
Richardson, M. W., 2152
Richter, E., 4913
Richter, F., 3306
Richter, F., 3306
Richter, H., 2837, 5968
Richter, W., 72, 2271, 5490
Richtmeyer, C. C., 6646
Rickers-Ovsiankina, M., 4209
Rickman, J., 1897, 3576
Riddoch, G., 2838, 5189
Rider, P. R., 3807
Riedel, G., 1831
Riedel, H., 2474
Rieger, W., 4489
Riess, B. F., 3512
Riesser, O., 6342
Rieti, E., 4651
Rife, D. C., 4029
Rigg, M., 896, 1566, 2033
Riggs, L. A., 1149, 6262
Riggs, W. C., 5009
Riggl, H., 3478
Rijnberk, G. van, 6172
Ringer, M., 1567, 6534
Rinsland, M. D., 3185
Rinsland, M. A. O., 6107
Rioch, D. McK., 1082, 2265
Riordan, J., 1031
Risset, R., 4438
Ritala, A. M., 2178
Ritter, E., 116
Ritter, G., 4030
Ritter, W. E., 1032
Riven, S., 4135
Rivener, J., 2938
Rizzatti, E., 1451
Roaf, H. E., 1122, 1791
Roback, A. A., 1033, 2508, 3100
Robbins, R. S., 437
Robbins, R. S., 437
Robbins, R. S., 437
Robbins, R. S., 437
Robbins, S. D., 437
Robbins, R. S., 437
Robbinson, E. H., 1151, 1152
Robinson, E. E., 4459
Roders, M., 3101
Robinson, D. E., 4459
Robinson, E. H., 1151, 1152
Robinson, E. R., 4557
Robinson, E. H., 1151, 1152
Robinson, M. F., 5297
Robinson, E. H., 1151, 1162
Roenau, E., 2475, 5789
Roener, E., 481, 2594, 5491
Roesels, R. S., 8061
Roman-Goldsieher, C., 3479
Roman-Goldsiehe Rorsc Rosar Rosca Rosen Rosen Rosen Rosen Rosen Rosen

Rosen Rosen Rosen Roske Roslov Ross, Ross. Ross, Ross. Ross, Ross. Rosset Roth. Roth, Rotha Rothn Roths Rotma

Rouge Rouke Rouse Rovne Rowe, Roy, F Rozenl Rózsa, Ruben Ruben Rubin, Rubin, Rubin-Ruch, Ruch, Ruch, Ruckm Rudert Rudert Rudnic

Ruffini Rühl, I Ruhnk Ruja, I Rulon, Rumse; Rundq Runner Rupp, Rusetsi Rush, C Rüssel, Russell Russell Russell Rust, M Rusu, I Rutten Ruttma Ryan, 1 Ryan, 1 Ryan, 1 Ryan, 1 Ryans. Rybick Rydin, Rylande

Saar, H Sabatin Sabom. Sacks, J

Rynear

Roper, E., 4971
Rorschach, H., 4840
Rosanoff, A. J., 2476
Rosenbaum, H. D., 2614
Roseca, A., 4841, 6452, 6477
Rose, J. A., 5821
Rosenbaum, B. B., 4951
Rosenberg, A., 4137
Rosenberger, H., 1633
Rosenberger, H., 1633
Rosenbeld, M., 996, 2383, 5886
Rosenfeld, M., 996, 2383, 5886
Rosenfeld, M., 9531
Rosenbeld, M., 5351
Rosenberg, A. M., 4815
Rosenzweig, S. M., 4815
Rosenzweig, A. M., 4815
Rosenzweig, A. M., 4815
Rosenzweig, A. M., 4816
Ross, C. C., 5010
Roske, H., 1163
Rossenzweig, A. M., 4816
Ross, F. L., 4587
Ross, J. F., 666
Ross, R. T., 2839, 3808, 4261
Ross, T., 2877
Rossettie, T. M., 3577
Roth, G. M., 667
Roth, G. M., 667
Roth, G. M., 667
Roth, C. M., 5692
Rothacker, E., 358, 3284
Rothney, J. W. M., 2651, 2675, 4407
Rothacker, E., 358, 3284
Rothney, J. W. M., 2651, 2675, 4407
Rothacker, E., 358, 3441 Rothney, J. W. M., 2651, 2675, 4407
Rothschild, F. S., 4491
Rotmann, E., 1322
Rottschafer, G., 1274
Rouart, J., 317
Roucek, J. S., 5456
Rouke, F. L., 3500
Rovener, H., 1218
Roye, S. N., 2781
Roy, R. S., 648
Rosenblum, Z., 4285
Rózsa, D., 6647, 6648
Rubenstein, B., 788
Rubin, M. A., 2257, 3318, 5713
Rubin-Rabson, G., 4915
Ruch, F. L., 3809
Ruch, G. M., 4365
Ruch, T. C., 668, 6264
Ruckmick, C. A., 1034, 1323, 2928, 5665
Rudert, J., 789 Ruch, T. C., bos., 5268
Ruckmick, C. A., 1034, 1323, 29
S665
Rudert, J., 789
Rudert, Kotte, R., 5190
Rudisill, M., 5011
Rudnick, J., 1429, 2981
Ruffini, G., 3324
Rühl, H., 1612, 2511
Ruhnke, C., 3102
Ruja, H., 47
Rulon, P. J., 1494
Rumsey, H., 6036
Rundquist, E. A., 1495, 5053
Runner, J. R., 2180
Rupp, H., 2753, 3706
Rusetaki, I. I., 4161
Rush, G. P., 704
Rüssel, A., 1454, 5043
Russell, D. H., 3186
Russell, E. S., 1884, 4031
Russell, L. W., 846
Rust, M. M., 1482
Rust, L., 5054
Rutten, F. J. T., 2034
Ruttmann, W. J., 953
Ryan, M. S., 4211
Ryan, T. A., 3968
Ryan, T. M., 5543
Ryan, W. C., 4375
Ryans, D. G., 4376, 6173, 6478
Rybicka, E., 4356
Rydin, H., 5260
Rylander, G., 6446
Rymer, C. A., 847
Rynearson, E. H., 5880
Saar, H., 318

5

Saar, H., 318 Sabatini, G., 3684 Sabom, M. V., 65 Sachs, H., 2421, 4916 Sacks, J. G., 1598

Sadowski, G., 2309
Saethre, H., 2943
Saffir, M. A., 1035, 1735
Sager, C., 5704
Sager, O. P., 6334
St. Clair, W. F., 1496, 5974
St. Kruk, W., 3810
Sainton, P., 3009
Sakel, M., 4162, 4163
Sakellariou, G. T., 5055, 5616, 5617, 5618
Saks, C. I., 1832
Sakurai, T., 5056
Salisbury, R., 5555
Salkind, E. M., 4816, 4817
Salmon, A., 3329, 5790, 6343
Salner, E., 4972
Salmon, A., 3662
Salter, M. D., 3204
Salter, M. D., 3204
Salter, M. D., 3204
Salter, M. J., 3497
Sanborn, H., 3811
Sand, A., 4573, 4692
Sand, H. J., 4377
Sanborn, H., 3811
Sand, H. J., 4377
Sanders, M. K., 5598
Sanderson, D., 3103
Sandiford, P., 537, 6649
Sandomirsky, M. I., 4709
Sandon, F., 5574
Sandulescu, M., 2652, 6650
Sanford, C. M., 4378
Santayana, G., 5108
Sapir, E., 4262
Sapirstein, M. R., 791
Sarbo, A. v., 319
Sarbo, A. v., 319
Sarbor, M. F., 5706 Sandulescu, M., 2652, 6650
Sanford, C. M., 4378
Santayana, G., 5108
Sapir, E., 4262
Sapirstein, M. R., 791
Sarbo, A. v., 319
Sargant, W., 759, 2970, 5955
Sartsiov, S. A., 3852
Sartorius, F., 5881
Sartre, J. P., 731
Sassaman, W. H., 5701
Sato, K., 118
Sato, T., 3398
Sato, T., 328
Savehenko, K., 1164
Saul, L. J., 792
Sautspruch, F., 1164
Saul, L. J., 792
Saussure, R. de, 3044
Savchenko, N., 4588
Savchenko, S., 4730
Savory, T. H., 3285
Sawa, H., 5057
Scala, N. P., 1091
Scanga, G., 6651
Scanga, G., 6651
Scanga, G., 6651
Scanga, G., 6651
Schaeder, J., 3104, 5457, 6017
Schabbel, E., 5714
Schader, H., 3606
Schaeder, J., 3911
Schaffer, J., 3911
Schaffer, J., 3911
Schaffer, R., 4212
Scharpenberg, L. G., 5715
Scharrer, B., 3330
Scharrer, B., 3330
Scharrer, B., 3330
Scharrer, B., 4589
Schatla, V., 2422
Scharpenberg, L. G., 5715
Scharrer, B., 3330
Scharrer, B., 4589
Schatla, V., 2477
Scheidheir, J., 6265
Scheidt, W., 2477
Scheidheir, J., 6265
Scheidt, W., 2477
Scheidheir, J., 6265
Scheidt, W., 2477
Scheidheir, J., 6265
Scheiffinkel, L., 2352
Scheinfinkel, L., 2352
Scheinfinkel, L., 2352
Scheinfinkel, L., 2389
Schering, W. M., 2754
Scheurer, O., 238
Schiller, P., 1199, 2423, 2478, 5290,
Schilf, E., 1087
Schiller, P., 438
Schilder, P., 438
Schilder, P., 438
Schilder, P., 438
Schilder, R., 438

Schiederup, H., 4164
Schlagel, E., 3578
Schlaiter, S., 2310
Schlauch, W. S., 736
Schlittler, E., 119
Schlomita, G., 239
Schmaltz, G., 3579
Schmaryan, A. S., 4530
Schmeing, K., 186, 810, 3437
Schmid, G., 1368, 1369, 1899, 2944
Schmidd, B., 1886, 3480
Schmidt, G., 1368, 1369, 1899, 2944
Schmidt, C. F., 748, 2361
Schmidt, C. F., 748, 2361
Schmidt, G. A., 5882
Schmidt, J., 6266
Schmidt, J., 6266
Schmidt, J., 6266
Schmidt, O. A., 4494
Schmieder, J., 4165
Schmitt, O. H., 669, 670, 5140
Schmitz, W., 5716
Schnedorf, J. G., 767
Schneersohn, F., 4061, 5058
Schneider, E., 4311
Schneider, E., 4311
Schneider, E., 4311
Schneider, E., 2384
Schneider, H., 4379
Schneider, H., 4379
Schneider, F., 2384
Schneider, H., 359
Schnyder, E., 2384
Schoe, H., 3206
School, H., 4286
Schole, H., 2755
Schoolfield, L. D., 3105
Schoolfield, L. D., 3105
Schooper, L., 3580
Schoot, H., 1887, 4166, 6448
Schouter, J. F., 1834
Schreider, E., 3045
Schott, K., 5059
Schott, K., 5059
Schott, K., 5059
Schott, K., 5059
Schotter, H., 1088
Schriever, H., 1084
Schriever, H., 1088
Schriever, H., 1084
Schriever, H., 1084
Schriever, H., 1084
Schriever, H., 108

Seashore, C. E., 2035, 3663, 3664 Seashore, H. G., 6344 Seashore, R. H., 1247, 5667 Seeber, B., 6595 Seeck, G. C., 1248 Seegers, J. C., 1496, 5974 Seeck, G. C., 1248
Seegers, J. C., 1496, 5974
Segal. J., 6202
Segalis, M., 6202
Segalis, M., 6202
Segawa, Y., 706
Segel, D., 2119, 2653, 5013
Sehlstedt, P., 1952
Seib, K., 6345
Seibert, K., 5493
Seidenfeld, M. A., 724, 1249, 2311
Seider, R., 954
Seifert, F., 1015
Seitz, H., 361
Sekreta, M., 4380
Seligman, B. Z., 1953
Sellars, R. W., 6174
Sellers, C. W., 523
Sellin, T., 2063, 3130, 6569
Selling, L. S., 322, 1449, 1599, 4952, 6451
Sells, S. B., 178, 362, 1250
Selover, R. B., 2137
Seltzer, C. C., 897
Selye, H., 5864
Sels, O., 732
Sen, J. M., 4287
Sender, S., 346, 363, 1470
Senges, N., 1978
Sennheiser, F., 4269
Seeps, R., 1978
Sennheiser, F., 4269
Seeps, N., 1978
Sennheiser, F., 4269
Seeps, R., 1089, 5180
Sevringhaus, E., 2900, 3574
Seward, G. H., 1325
Seyle, H., 794
Seymour, W. D., 2138, 5532
Shalo, J., 1835
Shakow, D., 1376, 5030, 5109, 5823
Shaloo, J. P., 2063
Shapiro, H., 671
Shapiro, L. M., 5921
Sharp, A. A., 4654
Sharp, D. L., 3438
Sharp, D. L., 3438
Sharp, D. L., 3438
Sharp, E. F., 2945, 5060
Shaw, A. G., 5522
Shaw, H., 179, 5885
Shakow, J. H., 2757
Shea, J. P., 1326
Sheddan, B. R., 4318
Sheeder, F. I., 3737
Sheehan, M. R., 4591
Shervin, R., 5317
Sheehan, M. R., 4595
Sheldon, H. D., 3287
Shen, N. C., 1836, 2805
Shen, S. C., 1753, 1888
Shen, S. C., 1753, 1888
Shen, T. C., 586
Sheppard, J. L., 927, 3154
Shevalev, E. A., 4169, 4170, 4171, 4818

Shuttleworth, F. K., 2675, 3234, 4415, 5061
Sicher, L., 617
Siegmund, H., 1954
Siemena, H. W., 242
Sigwald, J., 1819
Sible. M., 4495
Silberpfenning, I., 1838
Silberpfenning, I., 1838
Silderthein, A. G., 5368
Sild, J. J., 4689
Sill, J. B., 4213
Silverte, H., 745
Silvette, H., 745
Silvende, C. T., 1571
Simmons, L. W., 6526
Simmons, M. P., 955, 6653
Simon, R., 915
Simon, T., 4440, 4496
Simonneit, M., 928, 5975
Simonnett, H., 4496
Simonnen, K., 5599
Simonnen, E., 243
Simpson, G., 5062
Simpson, R. M., 4688
Sima, V. M., 4919
Singer, H. D., 5369
Singh, I., 3484, 5192
Sirkin, J., 3012
Sirovatko, S., 4176
Sisson, E. D., 441, 2139, 2840, 4920, 5014, 5216, 5224, 6538
Sivadjian, J., 5668
Sivadjian Skolnick, A., 120, 3404 Skramlik, E. v., 3288, 5794, 6175, 6176, 6177, 6178 6176, 6177, 6178
Skrsypińska, J., 3854
Slater, E., 324, 1456
Slater, E. T. O., 5958
Slater, P., 5824
Sleeth, C. K., 798
Sloane, P., 1600
Slocombe, C. S., 2087, 4312
Slome, —, 4563
Small, A. M. 2055 Sieeth, C. K., 176
Sloane, P., 1600
Slocombe, C. S., 2087, 4312
Slome, —, 4563
Small, A. M., 2035
Smeltaer, C. H., 443, 917
Smirk, F. H., 3985
Smith, A. J., 4330
Smith, B. A., 325
Smith, B. L., 3107
Smith, B. M., 5575
Smith, B. L., 3107
Smith, B. M., 5289
Smith, B. L., 3107
Smith, B. M., 5289
Smith, B. L., 3107
Smith, B. M., 3285
Smith, F. O., 619, 1663, 2268
Smith, F. W., 62
Smith, G., 3381
Smith, F. W., 62
Smith, G., 3381
Smith, H. B., 3235
Smith, H. B., 3235
Smith, H. B., 3235
Smith, J. B., 691
Smith, J. B., 691
Smith, J. B., 691
Smith, J. R., 69, 90
Smith, K. R., 6346
Smith, J. R., 69, 90
Smith, W. R., 2141, 133, 1165, 1166, 3405, 3913
Smith, M. M., 2578
Smith, M. M., 2578
Smith, M. M., 2578
Smith, M. M., 2578
Smith, M. R., 6102
Smith, W. R., 2141
Smith, W. R., 2144
Smith, W. R., 2141
Smith, W. R., 359
Snyder, C. D., 3666
Snyder, F. F., 996, 2383, 5886
Snyder, L. H., 6347
Snygg, D., 715
Soal, S. G., 3516
Sobel, R., 673
Sobel, R., 673
Sobel, R., 673

., 3970, 3971, 3972 Sowina, S., 3907
Spadavecchia, V., 6268
Spaeth, E. B., 123
Spassoff, D., 796
Spath, A., 4381
Spearman, C., 364, 556, 2344, 2664, 2759, 2760, 2878
Spearman, C. E., 3290
Speck, F. G., 5416
Speer, E., 2036
Speer, E., 2036
Speer, E., 2036
Speer, G. S., 3131
Spence, K. W., 1198, 1860, 2865, 2879, 4033
Spence, R. B., 2028
Spencer, D., 4214
Spencer, R. L., 6539
Speyer, N., 1946, 4049, 4062
Spiegle, E. A., 1091, 1771, 5669
Spiegler, S., 3700, 4382, 4383, 4384, 6654, 6655, 6656
Spiel, O., 957
Spielberg, P., 244
Spilker, G., 3608
Spitz, R., 2424
Spoort, D. T., 3238
Spooner, G. M., 3973
Spotnitz, H., 2284, 2799, 5745, 5746, 5747, 5748
Spragg, S. D. S., 1328, 3982
Sprague, G. S., 1956
Spranger, E., 3291
Springer, D. G., 848
Sprott, W. J. H., 1038
Squire, P. C., 849, 3669
Stäger, R., 4568
Squires, P. C., 849, 3669
Stäger, R., 4594
Stagner, R., 4568
Stahel, R., 230
Stahl, J., 4267
Stahler, N., 698
Stähli, R., 3014
Stanley, J., 3015
Stanceu, I., 4949
Stanger, M. A., 3109
Stanley, J., 3015
Stanton, F. N., 4923, 4924
Stanton, M., 1662
Starbuck, E. O., 16
Starcke, H., 1304
Stark, M. E., 2900
Start, A. S., 327
Staub, H., 5720
Stuffacher, J. C., 1186
Stcheglova, Z., 3564
Steedman, J. M., 4264
Steedman, J. M., 4268
Steedman, J. M., 4268
Steedman, J. M., 4268
Steedman, J. M., 471, 1636
Steele, G. R., 2140
Steele, M., 3813, 3814, 5110, 6179
Stefanelli, A., 4531
Stefaneacu-Goanga, F., 4497, 6452, 2576 Stefanescu-Goanga, F., 4497, 60-6570
Stefanini, A., 3915
Steffensen, E. H., 627, 795, 1293
Steffensen, J. F., 2761
Steggerda, M. S., 444
Stegner, K., 2841
Stein, L., 1573
Steinach, E., 4034
Steinbach, E. E., 2285, 2386

Steinbacher, J., 245
Stein-Beling, I. v., 1167
Steinberg, ..., 4395
Steinberg, D. L., 4091
Steinberg, W., 48
Steiner, J. F., 3110
Steiner, O., 5670
Steiner, V., 3247
Steingraeber, P. R., 2037
Steingraeber, P. R., 2037
Steinigrer, F., 1329, 5261
Steinitzer, F., 246
Stein-Lewinson, T., 337, 3667
Steinmann, I., 5370
Stekel, W., 3628, 5901
Stephenson, M., 3628, 5901
Stephenson, M., B., 3117
Stephenson, M., B., 3117
Stephenson, M., B., 3111
Stephenson, W., 98, 2300
Stern, E., 1458, 5959, 6612
Stern, L. S., 4724
Stern, M., 2634
Stevens, H., 1252
Stern, L. S., 4734
Stevens, H., R., 6540
Stevens, H., R., 6540
Stevens, M. R., 6540
Stevens, M. R., 6540
Stevenson, E. N., 2654
Stevens, H., 1252
Stevens, T. S., 2930
Stevens, T. S., 2930
Stevens, T. S., 2930
Stevens, T. S., 2930
Stevens, M. R., 6541
Stiles, W. S., 2314
Stinchfield, S. M., 6541
Stinnmann, F., 5621
Stoke, F. G. L., 497
Stockinger, G., 1253
Stoldard, G. D., 3190, 5064
Stoletzner, W., 4179
Stockinger, G., 1253
Stoddard, G. D., 3190, 5064
Stoletzner, W., 4179
Stockinger, G., 1253
Stoddard, G. D., 3190, 5064
Stoletzner, W., 4179
Stockinger, G., 1253
Stoddard, G. D., 3190, 5064
Stoletzner, W., 4179
Stockinger, G., 1253
Stoddard, G. D., 3190, 5064
Stoletzner, W., 4179
Stockinger, G., 1253
Stoddard, G. D., 3190, 5064
Stoletzner, W., 4179
Stockinger, G., 1253
Stoddard, G. D., 3190, 5064
Stoletzner, W., 4179
Stockinger, G., 1255
Stome, L., 4819, 6416, 6442, 6443, 6532
Stoland, O. O., 674
Stoller, W., 365
Stolite, H. A., 5671
Stölting, H., 5460
Stott, L. M., 1498
Stone, L. J., 1168
Stone, C. L., 247, 1574
Stone, C. P., 1254, 5263, 6454
Stone, C. R., 2655
Stome, L. J., 1168
Stone, S., 850
Stout, L., 498
Stott, M. B., 5539, 5578
Stoutfer, S. A., 3112
Stout, H., G., 288
Stott, M. B., 5539, 5578
Stoutfer, S. A., 3112
Stout, H., G., 288
Stott, M. B., 5539, 5578
Stoutfer, S. A., 3112
Stout, H., G., 288
Stott, M. B., 5539, 5578
Stoutfer, S. A., 3112
Stout, H., G., 288
Stott, M. B., 5 3738, 4215, 4386, 5579, 6140, 6671
Strasburger, E. H., 3856, 6220
Stratton, G. M., 3739
Straus, E., 4820
Strause, E., 248
Strause, E. B., 5961
Strause, I., 4113
Strebel, J., 2842
Strecker, E. A., 1957, 4403, 5130
Strecker, H., 4821
Strecker, H., P., 4180
Street, R., F., 1639, 3580
Strelin, G., 1330
Strelin, G., 1330
Stribic, F. P., 4056
Striegl, A., 1459
Stringaris, M. G., 6420
Strömberg, E., 2843
Stromberg, E., 2843
Stromberg, E., 2843
Stromberg, E., 2868, 6657
Stroud, J. B., 3672 6671

Strube, W., 6058
Strüder, I., 1575, 1576
Strughold, H., 4036, 5887
Strunz, K., 2656
Struycken, —, 3917
Stuart, C. E., 1370, 3494, 3518, 4742
Stuart, G., 6481
Stuart, H. W., 620
Stubbins, D. G., 2130
Studencki, S., 4394
Studentowics, I., 4596
Studnitz, G. v., 3486
Stuit, D. B., 540, 1640, 6110
Stullken, E. H., 2670
Stump, N. F., 2657, 5962
Stump, N. F., 2657, 5962
Stump, N. F., 2657, 5962
Stumpl, F., 6059
Sturdyvin, E. M., 541
Sturtevant, S. M., 6658
Stürup, G., 1841, 5067, 5599
Suares, N., 930
Subotnik, S., 4822
Süffert, F., 124
Suffolk, S. F., 6213
Suffan, M. M., 1980
Sugai, T., 1891
Sugar, O., 675, 3333
Sugi, M., 1861
Suh, T. H., 1892
Sulea-Firu, —, 5015
Sullivan, E. B., 329, 994
Sullivan, H. B., 105
Sullivan, E. B., 329, 994
Sullivan, H. B., 105
Sullivan, H. S., 4181
Sullivan, J. P., 1706
Summerskill, W. H., 3918
Sun, K. H., 1331
Sung, S. M., 2512
Suomalainen, P., 2931, 6348
Susuki, T., 4657
Sutherland, G., 6349
Sutherland, G., 6349
Sutherland, G., 6349
Sutherland, G., 423
Svehsson, S. L., 2387
Sweet, L., 6597
Symonds, C. P., 852
Symonds, P. M., 3239, 5016
Syz, H., 1460, 5494
Szakall, A., 5866, 5869, 5870
Szalai, A., 2425
Szekty, A., 330
Szewczuk, W., 3815
Tagawa, S., 5068
Tainton-Pottberg, A., 5821

Szeky, A., 330
Szewczuk, W., 3815
Tagawa, S., 5068
Tainton-Pottberg, A., 5821
Tait, W. D., 6082
Takagi, K., 3292
Takagi, K., 3292
Takano, K., 4927
Takatsuki, R., 707, 733
Talal, A., 4136
Talley, C. H., 2038
Tallman, F. F., 5069
Tallman, F. F., 5069
Tallman, G., 869
Tamaoka, S., 900, 5070
Tanaka, B., 3406
Tanakadate, —, 4265
Tanberg, C., 2039
T'ang, Y., 1842
Tannen-baum, F., 2595
Tanaley, K., 1106
Tanturi, C. A., 2269
Tao, L. K., 2040
Tarachow, S., 2183
Targoński, H., 4313, 4395
Tarugov, S., 1191
Tarwater, J. S., 4131
Taschdjian, E., 4498
Tasiro, T., 708
Tassoni, F., 6659
Tanterin, J., 125
Tatarenko, N. P., 4182
Taylor, C., 2041
Taylor, F., 6571
Taylor, F., 6571
Taylor, F., 6571
Taylor, F., 6571
Taylor, F., 615
Taylor, F. M., 445
Taylor, H. M., 445
Taylor, H. M., 445
Taylor, H. M., 445
Taylor, J., 1., 796
Taylor, J. H., 796
Taylor, N. M., 3495

Ter K Teulié Thade Thal. Tharp Thern Thiele Thom: Thoma Thoma Thom: Thom Thom Thom Thom Thoma Thoma Thorn Thorn

Teaga Teal. Técho Tempi Tempi Teppe Teräsi

Thorporthoule Thurel Thurn Thurst Tibbit Ticen, Tidd, Tiegs, Tierna Tietze. Tiffin, Tiitso, Tillote Tilouis Tilton. Tinber Tindal Tinel, Tinker

Thorne

Titeca, Titelba Titus. izzan Tiaden Todd, Todd, Todora Toenni Tolmar Tolmar Tomas Tomas

Conkile Tonn, Conner Toops, Tordru Torgers Torkles Torp, I Torre, Torren Town. Tozuka

Tomes

Teagarden, F. M., \$42, 965
Teal, E. E., 5183
Techousyrea, E., 6040
Templeton, R. D., 751
Templin, M., 4928
Tepper, R. H., 762
Teräskeil, H., 4536
Ter Keurst, A. J., 6572
Teulie, G., 6455
Thaden, J. F., 2042
Thal, J. H. v., 446
Tharp, J. B., 5581
Therman, P. O., 2255, 5689
Theslef, H., 5229
Thiele, R., 6456
Thenemann, H. G., 4598
Thomas, C. B., 1092, 5888
Thomas, M., 249, 2388, 2389, 3610
Thomas, M., 249, 2388, 2389, 3610
Thomas, W., 543
Thomas, W., 543
Thompson, C., 6372, 6373
Thompson, C., 6372, 6373
Thompson, C. B., 3132, 3583
Thompson, C. B., 3132, 3583
Thompson, C. B., 3132, 3583
Thompson, C. B., 796
Thompson, H., 3211, 6457
Thompson, H., 3211, 6457 Teagarden, F. M., 542, 965 Teal, E. E., 5183 Thompson, C. E., 796
Thompson, E., 5172
Thompson, H., 3211, 6457
Thompson, H., 3211, 6457
Thomson, G. H., 3974
Thomson, G. H., 3974
Thomson, W. A., 5391
Thomstad, H., 6401
Thyrndike, E. L., 49, 447, 2043, 2346, 2580, 3113, 4216, 4658, 4929, 5017, 5111, 6041
Thorndike, R. L., 1577, 2932, 5825
Thorner, F. H., 4314
Thorner, H. A., 4266
Thorner, M. W., 5963
Thorpe, L. P., 2143, 5071
Thouless, R. H., 2946
Thurel, R., 2844
Thurnwald, R., 1578
Thurelne, L. L., 50, 1255, 2347, 3440, 3756, 6181
Tibbitts, F. L., 5582
Ticen, Z. E., 6643
Tidd, C. W., 4183
Tiegs, O. W., 3929
Tiernan, J. J., 2348
Tietz, E. B., 2581
Tietze, C., 6542
Tiffin, J., 3114
Tiitoo, M., 250
Tillotoon, K. J., 1959
Tilney, F., 676
Tilquin, A., 2933, 4037
Tilton, J. W., 2236
Timasheff, N. S., 916
Timbergen, N., 3659, 6331
Tindall, G. M., 929
Tinel, J., 2483
Tinker, M. A., 734, 2315, 3115, 4930, 5194, 5795, 5796
Titeca, J., 6221
Titelbaum, S., 2907 Tinel, J., 2485
Tinker, M. A., 734, 2315, 3115, 4930, 5194, 5795, 5796
Titeca, J., 6221
Titelbaum, S., 2907
Titus, C. H., 3740
Tizzano, A., 6182
Tjaden, E. A., 4168
Todd, A., 1782
Todd, J. W., 51
Todoranu, D., 5018
Toennies, J. F., 5721
Tolman, E. C., 1214, 2349, 2881, 3816, 4659, 6283
Tolman, R. S., 6573
Tomaszewaki, T., 3975
Tomaszewaki, T., 3975
Tomaszewaki, T., 3975
Tomaszewaki, T., 4038
Tomescu, P., 2468, 2484, 2485, 2486, 2487, 2486, 2487, 2486, 2487, 1700,

42

AUTHOR

Trainor, J. C., 5112
Tramer. M., 2184, 3241
Trapp. C. E., 1579, 3016
Traube, T., 4442
Travers, R. M. W., 5538
Travis, L. E., 70, 71, 1093, 2044, 2782, 3334, 4532, 5143
Travis, R. C., 1256, 3817, 3987, 5826
Trazler, A. E., 6482, 6660
Treiber, N., 2783
Trendelenburg, F., 5463
Trodelenburg, F., 5463
Trodelengel, A., 2185
Trodelengel, A., 2185
Trodelengel, O., 2185
Trodelengel, O., 2185
Trodelengel, O., 2185
Trodelengel, O., 2185
Trodelengel, C., 1097
Troxell, E., 4350
Trunk, H., 485
Trurnit, H., J., 5144, 5145
Tryon, R. C., 1040
Tyon, R. M., 3174
Tsang, Y. C., 1040
Tyon, R. M., 3174
Tsang, Y. C., 1040
Tyon, R. M., 3174
Tsukamoto, H., 5889
Tsuchitani, I., 3407
Tsukamoto, H., 5889
Tsurner, E., 6313, 6351
Turney, A. H., 5019
Tusing, L., 6661
Tüting, L., 6042
Tuttle, W. W., 797
Tyler, H. T., 3191
Tyler, I. K., 5020
Tyler, R. W., 4387
Tyrrell, G. N. M., 5113
Treretell, M., 1332
Uesukill, J. v., 3296 Uesugi, M., 4533 Uexküll, J. v., 3296 Uger, C., 3741 Uglow, W., 2390 Uhl, W. L., 4217 Uhrich, J., 4268 Ungern-sternberg, R. V., 448, 4
J. S. Children's Bureau, 2064
U. S. Office of Education, 6663
Untersberger, —, 4039
Unteutsch, W., 1169
Updegraff, R., 583, 3242, 3743
Urban, R., 1888
Urehia, C. I., 6458
Uren, C. T., 5798
Urieva, F., 4728
Urinson, A., 4730
Ury, B., 3335, 4729
Usa, G., 1844
Uspensky, J. V., 52
Ustvedt, H., 1961 \$464 Väänänen, J., 6298 Vahrmeyer, H., 4823 Valbuen, A., 3668 Valentine, C., 4932 Valentine, C. W., 6141

Valentine, W. L., 4499, 6111
Valentiner, T., 902, 6664
Vampa, D., 1333
Van Alstyne, D., 2186
Van Dalen, D., 797
Van Denburg, J. K., 1642
Van der Leeuw, G., 6543
Van Gelder, D., 3449
Van Celler, D., 3449
Van Liere, E. J., 798
Vann, J. W., 2089
Vannas, M., 5196
Van Prohaska, J., 749
Van Riper, C., 1580, 2045, 4933, 5465
Van Tuyl, M. C., 2046, 2316, 3744
(Various), 53, 450, 854, 1041, 1643, 2047, 2762, 2763, 3818, 4602, 4603, 4604, 5114, 5372, 5902
Varnum, W. C., 5115, 6183
Vasilescu, A., 2489
Vassilenko, P. D., 6255
Vaughan, W. F., 1644
Vaughn, C. L., 3586
Vaughn, J., 5978
Veger, A. M., 4104
Veletzkaya, N. P., 3978
Velnn, G., 331
Verco, D. J. A., 518
Vernoeff, F. H., 5799
Verlaine, L., 2318, 2391, 4500, 4662
Verne, J., 6270
Verney, E. B., 1782, 5260
Vernon, M. D., 127, 2144, 4388
Vernon, P. E., 366, 2665, 5392
Verrier, M. L., 128, 129, 710, 2846
Verschuer, O. w., 3018, 3286
Vertes, J., 0, 3243
Vesalá, J., 6459
Veth, J., 2426
Vetter, A., 903, 5466
Vial, H., 6800
Vierkandt, A., 1582
Vielring, F., 2847, 2848
Vielring, O., 4269
Vignes, H., 6352
Vilaprenyó, J. S., 3587
Villinger, W., 4185, 4186
Vilter, W., 6222
Vinay, J. P., 5467
Vincent, —, 1683
Vincent, E. L., 3019, 6142
Visser, J., 3336
Volkmann, J., 130
Volkmann, J., 130
Volkmann, J., 130
Volkmann, J., 130
Volkmann, J., 330
Volkmann Vunder, M., 4176

Waals, H. G. v. d., 1162

Wachbolder, K., 1462, 3021, 5965

Wada, Y., 3408

Wadia, A. K., 1583

Wadsworth, G. W., Jr., 2091

Waetzmann, E., 3409, 3922, 4605, 4606, 5198

Wagener, H. P., 2849

Waggoner, D., 3934

Wagman, I. H., 5762, 5801

Wagner, G., 486

Wagner, I. F., 2187

Wagner, L. E., 5966

Wagner, R., 72, 131, 452, 2271

Wagoner, K. S., 1821, 1822, 1823, 2305, 3904

Wahl, M., 1868 Wahl, O., 2319 Wait, W. T., 3287, 5116 Wajzer, J., 5891 Wald, G., 2320, 5199, 6271 Waldeck, K., 5073 Walder, K., 1373 Walder, E., 1373 Waldsein, E., 6546 Wali-ur-Rahman, M., 1042 Walker, A. E., 3337, 3589, 5129, 5146, 5147, 6223 S146, 5147, 6223
Walker, E. E., 3746
Walker, E. L., 4638, 6287
Walker, E. L., 4638, 6287
Walker, R. Y., 6043
Walker, R. Y., 6043
Wallace, R. F., 9043
Wallace, I. K., 3747
Wallace, I. K., 3747
Wallace, S. R., Jr., 1170
Wallace, S. R., Jr., 1170
Wallace, S. R., Jr., 1170
Wallar, G. A., 958
Wallenstein, N., 1500
Waller, W., 2582
Waller, W. H., 1097
Wallin, J. E. W., 3748, 3749, 5373, 6184
Wallis, W. D., 5622
Wallin, M., 2658
Wallis, G. L., 2850
Walter, W. G., 2247, 3452, 5681
Walter, J., 6044
Walton, W. E., 905
Wang, C. H., 1892
Wang, G. H., 1775, 1845, 1893
Wang, S. C., 1744, 1745, 1746, 1747
Wangenheim, K., 4826
Waples, D., 1584, 3117
Warcollier, R., 6374
Ward, A. A., Jr., 1291
Ward, E., 1585
Ward, J. W., 5680
Ward, J. W., 5680
Ward, L. B., 3441
Ward, W. K., 6045
Warden, C. J., 189
Warkentin, J., 132, 133, 1171
Warner, L., 3519, 5293
Warner, W. L., 453, 1463
Warner, W. L., 453, 1463
Warner, W. L., 453, 1463
Warner, N., 1335, 3809, 4607
Warren, V. C., 2973
Warteng, E., 799
Washburn, M. F., 2321, 2882
Washburn, M. F., 2321, 2882
Washburn, A. C., 4187
Watanabe, K., 977
Watanabe, T., 2048
Waters, R. H., 1258
Watkeys, C. W., 4501
Watkins, A. L., 2392
Watson, B., 4663
Watson, D. L., 5673
Watson, W. E., 4666
Weber, P. L., 4504
Wedell, C. H., 83, 4608
Wedgwood, C. H., 4936
Weber, P. L., 4502
Weber, H. G., 4975
Weber, L., 3979
Weber, P. L., 4502
Weber, P. L., 4502
Weichert, C. K., 3549
Weigl, E., 5074
Weigler, L., 2049
Weigler, L., 2049 Weiss, A. B., 2189
Weiss, K., 4189
Weiss, K., 4189
Weiss, Frankl, A. B., 5075
Weisskopf, E., 340
Weizskcker, V. v., 3410
Weick, B. L., 2764, 2765
Wellek, A., 800, 907, 1043, 1737
Wellenius, O., 1962
Wells, E. F., 2490
Wells, E. F., 2490
Wells, F. L., 2148, 2667, 3590, 3980
Wells, W. A., 5802
Wells, F. L., 2148, 2667, 3590, 3980
Wells, W. A., 5802
Wells, J. H., 5265
Welton, L. E., 3720
Wend, J., 6574
Wend, G. R., 2766, 6234
Wenger, M. A., 2191
Wenke, H., 1164
Wentink, E. A., 2883
Wensl, A., 5469
Werkmeister, W. H., 3820
Werner, C. F., 251, 711
Werner, H., 1172, 5803
Werner, H. C., 3923
Werner, R., 1586
Werner, S., 1127, 6272
Wert, J. E., 2146, 5674
Wertham, F., 4954
Wertham, F., 4954
Wertheimer, J., 134
Wers, R., 2259
West, R., 3470, 6046
Westbrook, C. H., 1501
Westerman, K. M., 3670
Wever, E. G., 133, 1815, 2322, 2851, 3924, 3925
Weyrauch, W., 4610
Wheeler, L. R., 2659
Wheeler, R. H., 3287
Wheeler, R. H., 3287
Wheeler, W. M., 1174
Whisler, L., 3043, 5029
White, B. V., 5967
White, F., 737
White, H. R., 2491
White, H. R., 2491
White, H. R., 2491
White, H. R., 2491
White, F. T., 5979
Whitenend, T. N., 4315
Whitenend, T. N., 4315
Whiten, J. D., 1846
Whiten, J. D., 1846
Whiten, J. D., 1846
Whiten, I. E., 2378
Wiese, L. V., 4938
Wieser, R., 3050
Wigert, V., 3022, 6185
Wigger, H., 136
Wigger, H., 136
Wilser, D. T., 758, 766
Wilber, C. E., 1337
Wile, I. S., 1664, 2192, 3024, 6047

Wiley, A. M., 188, 1862
Wiley, L. E., 188, 1098, 1862
Wille, W. H., 4272
Wilkins, L., 2492, 5757
Wilkins, W. L., 1645, 4665
Wilkinson, H., 5171
Wilks, S. S., 5117, 6186
Williams, C. B., 4612
Williams, C. B., 4612
Williams, C. B., 4612
Williams, C. B., 4612
Williams, E. H., 332
Williams, E. H., 332
Williams, F. E., 1963
Williams, G. W., 2154, 3199
Williams, A. W., 2154
Williams, C. W., 2154
Williams, C. W., 2154
Williams, C. W., 547, 6665
Williams, C. W., 547, 6665
Williams, C., 5471
Williamson, C., 5471
Williamson, C., 5471
Williamson, E. G., 548, 959, 2131, 6083, 6112
Williamson, E. W., 4187
Williams, J., 1124
Williamson, E. W., 487
Williams, J., 124
Williams, J., 124
Willoughby, R. R., 998, 2051, 4827, 4845, 6547
Willson, J. L., 5209
Wilska, A., 6326
Wilson, D. C., 4289
Wilson, D. C., 4289
Wilson, D. P., 55
Wilson, F. T., 596, 999, 3611, 5022, 6143
Wilson, H., 4190
Wilson, H., 4190
Wilson, M., 5317
Wilson, M., 5318
Wilson, M., 5317
Wilson, M., 5318
Wilson, M., 5318
Wilson, M., 3247, 5594
Witmer, L. R., 4318
Witmer, M. H., 3193, 6666
Witt. M., 588
Wittels, F., 1374
Witting, E. G., 5172
Wittkower, E., 1338, 5980
Wittmann, O., 4939
Witty, P. A., 3248, 3249, 4389, 5474
Wittsicki W. 4319 \$474 Witwicki, W., 4319 Witz, H., 5893 Wodehouse, H., 3822 Wohlfahrt, E., 5393, 5975 Wohlfahrt, T., 137, 2854 Wohlfeil, M., 2324 Wojtaf, F., 5077 Wolcott, G. N., 4613 Wolf, A., 6349 Wolf, A., 6349

Wolf, E., 82, 2280, 2281, 3357, 3869, 4552, 4553, 5156
Wolf, K., 3940
Wolf, S. J., 5981
Wolfe, J. B., 4415
Wolfe, J. B., 4415
Wolfe, W. B., 455
Wolff, E., 3027
Wolff, H., G., 5225, 5969
Wolff, T., 6187
Wolff, W., 1847
Wolffe, D. L., 160, 191, 3520
Wolfson, N. M., 4674
Wolfson, N. M., 4674
Wolfson, N. M., 4674
Wolfson, I. N., 5374
Wolfson, I. N., 5374
Wolfson, S., 456
Wolter, H., 138
Wonderlic, E. F., 931
Wood, B. D., 4357
Wood, E. E., 192
Wood, G. C., 1646
Wood, L., 4291
Wood, S. H., 5539
Woodfork, O. H., 1388
Woodfork, L., 6463
Woodfork, L., 46463
Woodfork, L., 46463
Woodfork, L., 4663
Woodrow, H., 2325, 2885, 4666, 3828
Woodrow, H., 2325, 2885, 4666, 3828 Woodcock, O. H., 1388
Woodfin, L. L., 6463
Woodrow, H., 2325, 2885, 4
Woodrow, H., 2325, 2885, 4
Woodrow, H., 1647
Woods, M. T., 2596
Woods, M. T., 2596
Woods, W. L., 5375
Woodward, G. L., 1494
Woodworth, R. S., 3297, 6188
Woody, C., 589
Woodyard, E., 2043
Woolfenden, G. F., 3250
Woolsey, C. N., 659
Wootton, L. H., 333
Woolfenden, G. F., 3250
Woolsey, C. N., 659
Wootton, L. H., 337
Wright, A. J., 4040
Wright, C. A., 332
Wright, G. H. w., 3298
Wright, H. F., 802
Wright, H. W., 870
Wright, M., 2513
Wright, S., 803
Wright, M., 2513
Wright, M., 2513
Wright, M., 2513 Wright, S., 3331, 5141
Wrightstone, J. W., 3180
Wu, C. F., 1842
Wu, S. H., 1339
Wu, T. M., 1657, 1665
Wullstein, H., 4614
Wundrig, G., 5201
Wunsch, W., 3671
Wyant, R., 3081
Wyant, R., 3081
Wyant, R., 3081
Wyatt, S., 497
Wykes, U., 6274
Wyma, H. A., 6548
Wyman, W. I., 6293
Wynn, W., 760, 1270, 2353, 2369
Wynn, W., 760, 1270, 2353, 2369
Wyrsch, J., 6464
Wyss, O. A. M., 677, 1099, 5149
Wytyczak, L., 557, 4397 Xirau, J., 871

Yablonskaya, V. V., 5376
Yacorsynski, G., 1071
Yakovieva, E. V., 4139
Yamaguchi, K., 3488
Yamamura, M., 5377, 5378
Yamane, K., 713
Yamanahita, T., 5078
Yamauti, Z., 3412
Yarrell, Z., 5309
Yaskin, J. C., 1468, 2428
Yater, —, 6319
Yde, A., 334
Yeomans, A., 3672 Yeomans, A., 3672 Yerkes, R. M., 2366, 3673, 3982 Yi, C. L., 1744, 1745, 1746, 1747 Yokoyama, M., 3267 Yoshioka, J. G., 5215 Youmans, J. B., 5154 Young, A. C., 3338 Young, E. H., 6541 Young, G., 6189 Young, H. T. P., 4293 Young, I. B., 2326 Young, J. Z., 785, 6225 Young, F. C., 1375 Young, P. C., 1375 Young, P. T., 139, 1502, 2350, 4844 Young, P. V., 4294 4844
Young, P. V., 4294
Young, R. A., 367, 6049
Youngert, E., 3194
Young-Masten, I., 5079
Young-Masten, I., 5079
Youngstrom, K. A., 4731, 5724
Youtz, A. C., 1263
Youtz, R. E. P., 193, 1264, 3983, 5894, 6294
Yuki-Hirose, K., 3299

Youtz, R. E. P., 193, 1204, 3983, 5804, 6294
Yukl-Hirose, K., 3299
Zahirnic, C., 5023
Zajdorf, A., 2395
Zakonova, N. I., 4129
Zakrzewski, A., 3413
Zanchevski, D. I., 4732
Zangwill, O. L., 1863, 5820
Zapf, R. M., 3251, 3752
Zappert, J., 4828
Zawadski, B., 5894
Zawirska, J., 5080
Zaworski, T., 4041
Zawrocki, O., 4274
Zebrowska, M., 4356
Zechlin, R., 2193
Zeddies, A., 804, 3300, 4504, 6190
Zehnder, A., 4829
Zeiner-Henriksen, K., 5295
Zeise, E., 5266
Zelieny, G. P., 5829
Zeller, W., 3252
Zelyeny, G. P., 4042
Zeman, F. D., 1503
Zener, K., 3443
Zenker, V. E., 2584
Zentay, P. J., 2052
Zerler, M. L., 2585
Zerrahn-Wolf, G., 82, 2280, 2281, 3357, 3869, 4552, 4553, 5156
Zetlin, A., 740
Zewi, M., 5805
Zherebtsova, A. G., 5376
Ziegler, A., 2586
Ziegler, L. H., 194
Ziehen, V., 4830
Zietz, K., 1000, 1177, 2194, 2695
Zietze, K., 1000, 1177, 2194, 2695
Zietze, L., 1265, 1340
Zigler, M. J., 691
Zilboorg, G., 1004, 2587, 3521, 5296
Zilian, E., 805, 5267, 5975
Zimmerman, H., 2388
Zimmermann, R., 5475
Zinkin, A. M., 1100
Zorbaugh, H., 2195, 2696
Zultiger, H., 1981, 2514, 6483
Zumsteeg, H., 3674
Zunini, G., 1266, 1341
Zyman, R. M., 4192

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Accomp

Ability hu me

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De ed her Inc

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inte tesi

SUBJECT INDEX

Ability grouping, 3194 human, 2760 measurement, 556 motive, speed, 1255, 2347 profile, 3804 pronic, 3604
superior, 5111
adjustment and, 2696, 4355
age and, 1700
crime and, 5485
curriculum, 2115
determinants, 4212
diagnosis, 1253, 5455
personality and, 1482
psychopathy and, 308, 6393
(see also Aptitude, Intelligence)
Abnormality, allergy and, 4131
care, New England, 4745
child, 313, 1666, 4404, 5928
rural France, 5563
criminal, 1374
care, 818
definition, 6428 superior, 5111 care, 818
definition, 6428
Dostoevsky, F., 849
education in, 6626
heredity, 2474, 4188
Indians, 5342
intelligence, 4065
mate selection and, 301
revolution and, 2004
Rumania, 2431
startle pattern in, 772
testimony and, 1852
Acceleration of motion, effects, 5259, 5850
vision and, 5726
Accident determinants, 924, 2066, 2597 vision and, 5726 Accident determinants, 924, 2066, 2597 aviation, 1610 driving, 4304, 4310, 4311, 4968, 5503, 6076 blind spot and, 3151 lighting and, 2598 pedestrian in, 5501 prevention, 2087 aviation, 4956 child, 1685 child, 1685 driving, 4297 bibliography, 4316 industrial, 2604, 4306 propaganda, 3150 railway, 2603 selection and, 6577 proneness, 2607 correlates, 1608 driving, 3135 handwriting and, 6018 Accommodation, apparatus, 2730 asymmetry, 5759 bird, 1133 convergence and, 1785 fatigue and, 2075 lens displacement, 5765 mammal, 3860 mechanism, 1832 nerve supply, 1781 rate, vitamin A and, 5801 rate, vitamin A and, 5801
tests, reliability, 3882
voluntary, 2840
Acetylcholine, blood pressure and, 1892
destruction rate, 3833
formation, lesion and, 2780
magnesium and, 623
stimulation and, 2783
function, cord, 3331
ganglion transmission and, 3824, 3845
heart rate and, 754, 755
iris and, 1888 iris and, 1888 muscle contraction and, 3322 nictitating membrane and, 2263 sex cycle and, rat, 4680 sex cycle and, rat, 4000 Achievement, composition, 6083 intelligence and, 5558, 6670 economic status, 5048 test, 550, 942, 2636, 3715, 4980 benzedrine effect, 1706 high school, 4365

nursing, 6617 objectives, 4372, 4387

Wisconsin, 1641 victrola instructions, 4345 (see also Scholarship) Acidity, cortex, 6201 salivary, correlates, 5892 work and, 205 work and, 205
Action potentials, 1877
apparatus, 3806
(see also Brain, Cord, Muscle, Nerve
Retina) Retina)
Activity, adrenal cortex and, 2903
benzedrine and, rat, 4723, 5235
drug effect, rat, 240, 1340
fetus, factors, 5614
heredity and, rat, 1295
hibernation and, 4028 infant, correlates, 2177 light and, insects, 4612 rat, 3992 thirst and, cat, 208 thyroid and, rat, 2902 yeast and, rat, 6324 (see also Movement) Acuity, sensory, military selection and, 6081 visual, 5730 al, 5730 apparatus, 3789, 5745 aviation, 6580 mavigation, 6585 brain lesion and, cat, 1165 brightness and, 1102, 2310, 3371, 4545 cat, 1116 duration and, 1788 color and, 3400, 4555 color contrasts and, 96 dark adaptation and, 3402 depth perception and, 2810 distance and, 1159 distance and, 1159 fluctuation, 684 growth of, cat, 133 instruments and, 5728 lizard, 2283 oxygen lack and, 680 test chart, 1128 child, 1109 vertebrate, 1171 Adaptation, auditory, galvanic response, 202 binocular relations, 1170, 2826 brightness discrimination, 5155 color, 4554 dark, acuity, 3402 determinants, 2284 insect, 5153 light flashes, 5725 oxygen, 5739 oxygen, 3739 pregnancy, 4567 testing, 5752 vitamin A and, 1830, 4560, 5154, 5171, 5191, 5784, 5805, 6243 flicker, 6272 foveal, 123, 2799 galvanic, audition and, 3996 muscle, smooth, 5192 olfaction vs. vision, 5748 pupil mechanism, 5762 retinal metabolism and, 2299 potential and, 1789, 6262 thermal, 93, 1148 vascular correlates, 1823 work and, 5870 vibratory, 83 visual, 124 age and, 2837 flicker, 6272 age and, 2837 apparatus, 1783, 5745 child, diurnal change, 102 threshold and, 2799 threshold and, 2799
(see also Fatigue)
Adjustment, child, 5934, 6463, 6620
child, gifted, 2169, 2696
consistency, 4833
defective, 1386
drawing and, hypophrenics, 3028
intelligence and, 6692
marital, 2015, 2016
measurement, test, 1652
test vs. clinical, 3031
muscle tension and, child, 1701

old age, 1489 principles, 353, 455, 2702, 5387 questionnaire, item analysis, 1485 Scottish subjects, 1491 scholarship and, 2099 school, 950, 2112, 2653, 6098 life vs., 4370 New York, 3680 personality and, 5981 social, 4217, 6527 birth regulation and, 5454 birth regulation and, 5454 child, 3217 child, 3217
race and, 1436, 2008
student, 2129, 3165
accelerated, 4355
determinants, 5013
teacher, 4380
vocational, 919, 2091 Adolescence, 5031 auditory acuity, 2326 auditory acuty, 2326 characteristics, 6125 Chinese, personality, 1501 civic participation, 974 color discrimination, 2308 constitution, 1705 personality and, 3592 deception, 5617 deception, 5617 delinquency, 1590, 5493 Germany, 3124 parent alcoholism and, 4293 Sweden, 6563 treatment, 6550 treatment, 6550 employment, 922 rating, 1609 esthetic judgment, 6625 ethical judgment, 5055 fantasy, 5080 gifted, personality, 1482 graphs describing, 5061 growth, 3252 study, 1679, 1695, 4421 humor, 3038 hypophrenic, training, 4320 hypophrenic, training, 4320 intelligence differences, 976 interests, 1668, 4204, 6676 introspections, 970 laws on, Germany, 4237 laws on, Germany, 42 leadership, 6533 male, 2677 mother conflict, 1675 needs, 6127 novel of, 989 originality, 971 perseverance, 863 personality measurement, 3043, 3598, 499 types, 5273 types, 5273
poetry writing, 5619
problems, 5610
reading, radio influence, 5445
religion, 5616
responsibility, 475
rites, primitive, 5452
self concept, 5056
self reliance, 5066
sex beliefs, 895
experiences, 998 sex beliefs, 895
experiences, 998
social distance, 2180
relations, 588, 2176, 5592
study methods, 4415
superstitions, 3251, 5618
transiency, 3094
unemployment, 4407
values, 3760
vocational attitude, 6673
(see also Boy, Child, Girl, Puberty)
Adoption criteria, 5594
disclosure to child, 2183
repeated, 2161 disclosure to child, 2183
repeated, 2161
system, 2156
Adrenal, blood pressure and, 749
conditioning and, 5220
cortex, activity and, 2903
adaptation, 1299
asthenia treatment, 2900
emotional bytespelycemia emotional hyperglycemia and, 1298 work and, 2918

muscle tension and, child, 1701

effect, 2263 effect, 2263
emotion and, 4824
hypothalamus and, 658
inaufficiency, 794
removal, marmot, 745
Adult attitudes, child behavior, 564, 2139
education, 5214, 5577
consumer's, 4970
Advertising, attention value, 921, 4973
attitude effects, 4967
college, 2602 college, 2602 location, 3145 medium, 3137, 6589 psychology, history of, 4964 retention, 2074 sales vs. preference, 4965 testing, 4303, 5508 textbook, 1711, 2070 Aesthetic, see Esthetic Affect, see Emotion After-image, see Image Age, altitude effects and, 5238 . altitude effects and, \$238 astigmatism and, \$734 color mass and, 3906 delinquency and, 1589 dexterity and, 5588 distribution, Switserland, 5987 driving and, 4955 drug addiction and, 5242 employment and, 918 giftedness and, 1700 hedonistic effect in memory and, 720 intelligence and, teacher judgment, 4374 menstruation and, 2368 metabolism and, man, 2912 metabolism and, man, 2912 neuroticism and, 4845 neuroticism and, 4845
proprioceptive sensitivity and, 4544
repetitive work and, 6346
retroactive inhibition and, 157, 1857
social relationships and, 5400
vocabulary and, 5823
Aggression, 1732
impulses, 2938
philosophy of, 606
resistance and, 5279
speech disorder and, 4928
Agnosia, see Aphasia, sensory
Agraphia, see Handwriting
Akinesis, see Cataplexy
Alcohol, brain circulation and, 5888
distribution, body, 4708
driving and, 5535
pleasure from, 2545 pleasure from, 2545 reaction effect, 4003 tolerance, 2921 Alcoholism, 1943, 1957, 2979, 2982, 5347 crime and, 5318 crime and, 5318 determinants, 1361, 2997 environmental, 826 Germany, 5364 hallucination, 3002, 3588, 4115 parental, child intelligence and, 5007 parental, child intelligence and, 5007 crime and, 4293 personality and, 1959 eex crime and, 477 treatment, 1399, 1916, 1917, 4150, 5362 woman, personality, 2958 Allergy, intelligence and, 994, 5202 personality and, 5980 psychoanalysis, 3490 psychoanalysis, 3490 psychoanalysis, 3490 feects, 227, 228, 2357, 2358, 2359, 3488 age and, 5238 heterophoria and, 126 heterophoria and, 126 proprioception and, 3768
reflexes and, 4036, 5887
tolerance, carbon monoxide and, mouse, 4704 (see also Pressure) (see also Pressure)
Ambivalence concept, 2435, 2475
definition, 4210
Amentia, see Hypophrenia
Amnesia, see Memory loss
Amphibia, brain lesion effects, 632 brain nutrition and growth, 2898 transplantation, 61 electric narcosis, 6295 eye growth determinants, 1322

beart function, 5893 hibernation, hormone, hypnosis, 218 hypophysis and retinal pigment, 114

learning, 1182

motor reaction, light and sound effects, 1275 1275 growth, 4731 muscle potentials, 778 olfaction and metamorphosis, 3401 organization centers, 5882 retina pigments, 2795 organization centers, 3882
retina pigments, 2795
potentials, 1845, 2255
sex behavior and vision, 3989
skin stimulation, reflexes and, 1277, 1294
tonus and, 1311
Anesthesia, brain potentials and, 3829
hysterical, 2483
respiration and, cat, 2913
simulated, 1921
superficial, 5188
Animal behavior, 2225, 3285
types, 1267
eclipse behavior, 1174
emotion and memory, 3998
experimentation, conditions, 3415
eye movements, review, 3405
intelligence, comp'exity and, 3931
psychology, 2195, 3258, 3466, 5650
depth psychology vs., 5895
method, 3805
research, 2196, 5081
review, 2756
rhythm, induced, 4027
societies, 433, 6484
speech, 889, 4884
young, 1886
(see also Invertebrate, Vertebrate)
Annoyance, professors' habits, 3181
questionnaire, categories in, 5973
Anorexia, see Appetite (ace also Invertebrate, Vertebrate)
Annoyance, professors' habits, 3181
questionnaire, categories in, 5973
Anorexia, see Appetite
Anthropology, Africa, 3651
educational, 1621
essays, 412
history of, 5655
man in, 54
outline, 6526
philosophical, 609, 3257
portrait in, 2583
psychiatry and, 2626
psychology and, 2049, 3616
(see also Culture, Primitive, Race)
Anticipation, apprehension and, 3901
reward, chimpansee, 718
Anxiety, child, 1347, 6130
cold and pulse, 5967
control, 3030
culture and, 3034
determinants, 1356, 2428 determinanta, 1356, 2428 physical, 2978 heredity and, 3552 hormone and, 777 poetry and, 4738 poetry and, 4/38 psychotherapy and, 4804 Ape, see Primate Aphasia, 416, 1960, 3014, 5332, 6389 crossed, 6426 crossed, 6426
equivalent, epilepsy, 4750
examination techniques, 5915
intelligence in, 1934
phenomena, 4088
sensory, 5346 sensory, 5346
correlates, 281
laterality and, 5949
tactile, 1140, 1909
visual, 1454
Apparatus, blood pressure, 1288, 4035, 5632
respiration, 1016
chronaxy, 4492
color recognition, 594
depth perception, 3292, 3800
electrophysiological, 1719, 2218, 2224, 2719, 3806, 5649, 5657
enuresis, 2233
eye movement, 1712
animals, 2766
heart rate, 5092 animals, 2766
heart rate, 5092
sound, 1731
labeling, 1714
learning, 2877, 3790, 5636, 5667
moisture reaction, arthropod, 4001
motor phenomena, 35, 2186, 3817, 4483,
4496 4496 olfaction, 3288, 6175 parapaychology, 5113 photometric, 2757, 4466, 5635 proprioception, 5770 reading, 545, 694 recording, 55, 612, 1713 respiration, 2206, 3267, 3277

scoring, 2752 skin senses, 6177, 6178 sound, 6171 generator, 3299 generator, 3399 intensification, 3802 proof chamber, 6172 recording, 1715 speech recording, 2003, 2211, 3821 stimulation, 602, 1007 taste. 6176 stimulation, 002, 1007 taste, 6176 timing, 19, 592, 2212, 4461, 5640 visual accommodation, 2730 acuity, 3789, 5745 adaptation, 1783, 5752 Appetite, blood sugar effect, 1242 food choice and, 4673 loss, child, 982 vitamins and, bird, 4710 Apprentice, vocational attitudes, 2620, 6070 Apprentice, vocational attitudes, 2
Apraxia, 5346
constructional, 2987
facial, 4748
Aptitude, school, 554
testing, 2621, 4396
railroad, 2600
work, 6581
(see also Ability)
Arithmetic, intelligence and, 6652
learning, 4326 (see also Ability)
Arithmetic, intelligence and, 6652
learning, 4326
readiness, 4984
Art ability, astrology and, 5089
child, 584, 3202
correlates, 5025
heredity, 2577
race and, 6524
analysis, 5421
appreciation, child, 981
Japanese, 5046
suggestion and, 4920
test, 4233
culture, handedness, 5420
Germany, 2549
graphic, personality and, 4251
idea in, 4938
motivation, 1995
part vs. whole in, 3047
picture analysis, personality and, child,
5612
portrait preference, child, 4428 5612
portrait preference, child, 4428
paychoanalysis and, 1342
schizophrenic, 284
teaching, crafts, review, 5548
review, 5564
(see also Drawing, Esthetics)
Arthropod, behavior, spider, 3463, 4037, 6314
moisture reaction, 4001
movement, 6224
personus avstem, 2220 nervous system, 2270 orientation, 1173 orientation, 1173
sense organ, spider 4548
spider, web construction, 2933
(see also Crustacea, Insect)
Ascendance, see Dominance
Aspiration level, accomplishment and, 1300 Aspiration level, accomplishment and, Association, backward, 4649 forward va., 3977 dog., 2341 interference, 2346 motor test, 210, 3438, 3591 complex indicators, 1306 psychosis, 3011 retroactive inhibition and, 5224 schizophrenia, under shock, 6460 spontaneous, 1852 achizophrenia, under shock, 646
spontaneous, 1854
stimulus in, 1222
test, boy delinquents, 4950
parkinsonism, 262
times, 3442
word, child, 985
pairs, 3421
race differences, 3048
Athletics, see Sport
Attention, 3943
brain potentials, vision, 4532
disturbance, neurosis and, 4751
driving and, 3703
fluctuations, 5476
personality and, 3608 personality and, 3608 skin resistance and, 1271 test, 5818 test, 3518 theory, 5218 vocational, 1616 (see also Distraction) Attitude acceptance, 1348 adolescence, 3760

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Auditio

Autom Autono an bra car

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ner

pay rel: res

sta

stu

after-image and, 1844
aims, college, 533
America, British child, 2001
antagonism, business, 4200
avoidance, Navaho, 436
change, audience, 3070, 3090
college, 4244, 4883
spontaneous, 3665
technique, 1532
child behavior, nurse, 564
color, 5179
confidence, group relations and, 6508
consistency, 4833
death, primitive, 4887
deprivations, 4216 deprivations, 4216 discussion effect, 1577 egocentric, in conversation, 4879 ethical, child, 2166 family, 423 group, 4904 high school, parent, 510 intelligence test, 2114 interview, 1970 judgment and, 4849 marks, 536, 2093 marriage, 873 student, 5398 needs, 5432 ocean, 2576 ocean, 2576
old age, 1489, 1503
organization, 335
persons, 1502
political, 1522, 1538, 1546, 1561, 3623,
4878, 4910, 5434, 5461
positive and negative, 1972
possessions, 6022
pregnancy, 4197
prisoner, 1598
psychosis, Jew, 1982
race, 407, 410, 899
religious, relief clients, 3638
scale construction, 347, 1543, 1560, 2560,
4897
factor analysis, 5098 factor analysis, 5098 item validity, 3067 students, 6019 usefulness, 4248 school problem, 542 self, 4211 stuttering, 5428 sex, 2565 social, 2084 correlates, 1545 functioning, 371 nationality and, 5456 student, 1529, 2578, 5448 success, monkey, 1211 teacher, 2631, 5557 war, 2014 teacher, 2031, 3557 war, 2014 weight lifting, 1160, 3905 woman, Germany, 2553 work, 2518, 4305 work, 2518, 4305
apprentices, 2620, 6070
metabolism and, 741
(see also Opinion)
Audition, see Hearing
Automobile, see Driving
Automobile, see Driving
Automobic, accommodation and, 1781
activity, measurement, 3313
anhidrosis and, 667
brain potentials and, 5701
carotid reflex and, 1092
cataplexy and, 4726
circulation and, 1741, 2929
correlation, 3835
disease and, 6215
disturbance, unilateral, 4774 disturbance, unilateral, 4774 drug effects, 3848 function, 1768, 2384, 4506 correlative, 4512 heart acceleration, 647 inhibition and, 1080 labyrinth and, 2899 muscle chronaxy and, 2393 polarization and, 3304 tone and, 774 nerve transmission, 3302, 3303 pain and, 5790 psychosis and, 1407 relationships, 2777 respiration and, 58 section, skin resistance and, 5712 . stability, metabolism and, 788 study, method, 4799

Aviation, accident prevention, 4956 altitude effects, 2357, 2358, 2359, 5834 audition in, 5163 critical periods, 3708 disturbance, 1310 vision, 679 fatigue test, 2075 neurosis and, 2974, 4822 neurosis and, 2974, 4822 occupations, 499 orientation in, 925 problems, 3687 retinal injury, 5152 selection, training, 3689 temperament, 2089, 3688 tests, 2908, 3138, 5520 vision in, 2317, 5196, 6580, 6585 tests, 4314 Behavior development, child, 5598 expressive, judgment from, 4835 problem attitude, school, 542 benzedrine effect, 3205 birth rank and, 2192 brain invasion and, 4094 determinants, 828 camping, 2168 child, 2690, 4403, 4414, 4420, 5076. 6126 prevention, 498 school, 5079 personality and, 5009 teacher's attitude, 5021 teacher's attitude, 5021
prediction, 2692
territorial, fish, 3659
lizard, 3061
thought and, 24
types, animal, 1267
Behaviorism, 31, 2210
history, 4468
status, 1033
Belief, see Opinion, Religion
Benzedrine, achievement test and, 1706
activity and, rat, 1340, 4723, 5235
alcoholism and, 5362
behavior problem and, 3205
boredom and, 3445
effects, 759, 6319
intelligence and, 2871 effects, 759, 6319 intelligence and, 2871 neurosis and, 5366 psychoanalysis and, 2423 psychosis and, 801 Bibliography, bilingualism, 6642 child care, 3758 crime research, 2063 dislection and science, 3787 dialectics and science, 3787 driving, 3694, 4316 education, 3729 Canadian, 5575 negro, 6607 research, 6621 U.S. Off. Educ. publications, 6663 esthetics, 5409 homicide, 2594 laterality, 6313 Marxism and psychology, 3788 Milan laboratory, 6165 military psychology, 4302 music education, 502 personality tests, 1487 personality tests, 1487
personnel, 6658
propaganda, 3107
psychology, 3259
German, 1724, 1737
Rorschach, 366, 6476
Sheppard, W. F., 1003
teacher training, 4346
teaching method, 2095, 3174, 4330
vocational guidance, 3193, 6666
(see also Review) (see also Review) Bilingualism, bibliography, 6642 child, 6609 intelligence test and, 1219, 2024, 2030, 3930 stuttering and, 2044 teaching and, 204 teaching and, 6633 vocabulary, 4997 Biology, aspects, 5671 concepts, 615 mathematical, 5663 psychology and, 11, 5084 recapitulation theory, 5095 vocabulary, 2654 Bird, cataplexy, 1334, 1879, 5261 color preference, vitamin and, 3393

embryo development, 4012 film, 585, 1022 respiration, 586 eye, 109, 3867, 4598 food preference, 6327 taking and vitamins, 4710 hibernation, 245 instinct, 6331 instinct, 6331 satiation, 4706 learning, conditioning, 1184 discrimination, 1110, 1185, 1778, 4546 migration drive, 2917 nerve-muscle conduction, 3826, 6197 nervous system, 1059 nystagmus, cerebellum and, 1071 reflex, pupillary, 1893 decerebrate, 3452 sex behavior, \$255
cycle, light effect, 3446, 3991, 5151
social behavior, 4864
vision, accommodation, 1133
cortex and, 3336
defect, heredity, 2812
types, 1807
h beliefs, primitive, 2613 types, 1807
Birth beliefs, primitive, 3613
control, intelligence and, 231
mental hygiene aspect, 1424
lesion, retardation and, 285
order, behavior disorder and, 2192
birth factors and, 5597
correlates, 3248
defect and, 5339 defect and, 5339
personality and, 1477
psychosis and, 5946
premature, effects, 2947
growth and, 4439, 5072
intelligence and, 1902, 4399
twins, 6119
process, psychological factors, 2438
rate, correlates, 2529
decline, determinants, 1526
differential, 406, 449, 1519
birth rank and, 3058
paternity measurement, 6542
hypophrenia, 6382
intelligence and, 5208, 5306
college, 2051, 6547
status, 6124
marriage age and, 5991 marriage age and, 5991 motive, 902 motive, 902
woman, 2685
population density and, 1551
regulation, maladjusted, 5454
esttlement project, 1521
status and, 4243, 6502
teachers, 3621, 6008
tobacco and, rat, 1239
trends, Scotland, 1520
port of the status and 231 season correlates, 2371 Blindness, auditory localization in, 6232 idness, auditory localization in cortical, 3884 Denmark, 5160 geography ability and, 3723 hysterical, child, 5322 illusion in, 1107, 3862 orientation, 4569 review, 2303 space experience in, 3910 tactile perception in, 4543 Blood circulation, altitude and, 228 autonomic and, 2929 diencephalon and, 6205 disorder, chronaxy in, 3839 personality and, 858 reflex control, 2354 respiration and, 780, 1881 work and, 6297 work and, 6297
content, emotion and, 7697
content, emotion and, 6474
exercise and, 6298
infant, race difference, 5608
work and, 4689, 5853
disorder, brain, 2250, 4815
psychic components, 331, 5931
psychosis and, 1412
formation, brain control, 2381
nerve impulse transmission and, 626
pressure, adrenalin and, 749
apparatus, 1016, 5632
bladder effects, 2392
brain potentials and, 5678
emotion and, 4038, 4132
labyrinth and, 4021, 6305 n and, 626, 2239

oxygen lack and, 4703
pain and, 3904, 3916
paresis, 3563
psychosis, 4157
prison, 5367
receptors, 1805
recording, 1288, 4035
vision and, 5726
work and, 5883
sugar, appetite and, 1242
bee, 2355
emotion and, 5836 sugar, appetite and, 1242
bee, 2355
emotion and, 5836
mental correlates, 2436
oxygen lack and, 5849
psychoanalysis and, 2402
supply, cerebral, dog, 5694
system conditioning, schizophrenia, 5343
light effects, 3359, 6352
type, Rorschach and, 5384
volume, pain and, 2305
(see also Capillary)
Body potential, sex cycle and, chimpanzee, 2366
proportions, child, 3218
rotation, reaction time, 3987
schema disorder, 3884, 4067
hemiplegia, 4177
sensations, 3923
taboo, 1979
type, see Constitution
weight perception, 1809
psychosis, 1944
Boredom, benzedrine effect, 3445
personality and, 2497
character, home and, 1708
delinquent, 2589, 4276
association test, 4950
characteristics, 4948
high school, interest, 2651
runaway, 6688 high school, interest, 2651 high school, interest, 2051 runaway, 688 transiency, family situation and, 5051 voice change, 2009 Brain activity, 2771 audition localization and, 2832 audition localization and, 2832
pathways, 621
blood disorder, 2250, 4815
dog, 5694
formation and, 2381
supply, alcohol and, 5888
hypnosis, sleep, 1318
chronaxy, 4509
circuits, 5684
cognitive activities and, 62, 65, 285, 1075, 1076, 1226, 1240, 1772, 2770, 2868, 3549, 4635, 5143, 5677, 6275, 6276
corpus callosum, lesion effects, 5722
locomotion and, 3841
diencephalon, emotion and, film, 1765
review, 3306
circulation, respiration, 6205
electric threshold, 5691
emotion and, 3329
evolution, 676 emotion and, 3329
evolution, 676
heat changes, 5136, 5137, 5142
hemisphere removal, 2781
conditioning and, 4652
lack, behavior in, 1090
laterality, handedness, eyedness, 2268
lesion, cerebrum, symptoms, 5303
depression and, 3580
diagnosis, 4817
eve movement and, 1091 eye movement and, 1091 frog, 652 frog, 652 grasping and, rat, 1282 hallucination and, 3553 motor disorder and, 3836 nystagmus and, guinea pig, 2890 psychoanalysis and, 5325 psychosis, 1908, 1926, 2967, 3546, 4113, 4192, 4770, 4775 puberty praecox and, 318 reflex, autonomic, 1082 righting, and, 1273 startle, and, 265 rignting, and, 1273 startle, and, 265 vestibular and, 3842 Rorachach and, 358, 858, 865 sequelae, child, 5311 skin sensitivity and, 3380 will and, 827 lisard, 1759 lizard, 1759 localization, 66, 5680, 5697, 5711 acalculia, 3548 emotion, 3455 meninges, carcinoma, 2482

microcephaly, case, 5942 movement and, 201 movement and, 201
nutrition, growth and, 2898
parietal lobe, discrimination and, 6264
posture and, lizard, 657
potentials, 636, 654, 1047, 1086, 2244, 2260
anesthesia and, 3829
apparatus, 5649
attention, vision, 4532
automatic, 5699 blood pressure and, 5678 cerebellum-cerebrum relations, 3337 cerebellum-cerebrum relations, 3337 child, 1079 consciousness and, 70 correlates, 5130 cortex vs. thalamus, 5127 deafferented, 3310 distribution, 3830, 5695, 5713, 6210 drug effects, 631, 2773, 5687 epilepsy, 321, 1408, 4778, 5930 form, 3851 galvanic reflex and, 1066 growth and, 5148 galvanic reflex and, 1066 growth and, 5148 heredity, 2775 hysteria, 6221 interpretation, 1069, 2243, 4510 introversion and, 2253 laterality and, twins, 67 leaion and, 5125, 5698 motor, visual, 3852 muscle activity and, 5131 pathological, 5704 perseveration and, 71 pilomotor activity and, 5701 reading, 2776 reading, 2776 rhythm, 69 sensory stimuli and, 2240, 3328, 4511, 6202 shock treatment and, 2257, 3318, 5681 sleep, 632, 1054, 1055, 3314, 6208 subcortical, 4516 subcortical, 4516 touch and, 3334 primate, 1750, 5719 Purkinje cells, fatigue effects, mouse, 1045 respiration and, 662, 1313 schizophrenia, 3000 speech and, 63, 2052, 2782 stem, 5139 auditory potentials, 1151, 1152 reflex and, 1083 subcortical, dog. 1077 transplantation, amphibia, 61 twins, 68 vision and, 1062, 1068, 1074, 1089, 1105, 1154, 1165, 1166, 1775, 3373, 3838, 4522, 5122, 5180, 5705, 6279 weight, intelligence and, 3850, 5121 twins, 68 (see also Cerebellum, Cortex, Frontal, Medulla, Temporal, Thalamus) dulla, Temporal, Thalamus)
Brightness, action potentials and, 1775
acuity and, 1102, 1788, 2310, 3371
after-image, latency, 1813
behavior and, monkey, 3377
colors, monkey, 682
contrast, 1831
discrimination, 90, 2813, 5150, 5170
adoptation and 5155 adaptation and, 5155 brain and, 1068 cat, 108 color and, 689 cortex and, cat, 3913 rat, 3877, 3882 insect, 2295, 3887 intensity duration and, 5170 latency, 2833 law, 3356 rat, 191 flicker and, 2280 fish, 5156 measurement, 2757 pupil size and, 1285 reading and, 2315 road, accidents and, 2598 sensation, growth and decline, 3392 threshold, 76 Business, antagonism in, 4200 complaint adjustment, 1604 executive, selection, 5527 training, 2068 psychology, 4963 textbook, 2088 teaching, review, 5567 training, 2097, 5554

Capacity, see Ability, Aptitude
Capillary, hypophrenia, 3584
microscopy, 5044
sympathetic control, 1741
training effect, 1880
Carbon dioxide, nerve excitability and, 644 oxygen lack and, 756, 3459 monoxide, altitude tolerance and, mouse, monome, artitude toserance and, 4704 driving and, 4301 poisoning, 6381 Card guessing, 6381 Card guessing, see Parapsychology Cardiac, see Heart Castration complex, 4733 conditioning effect, 3428 copulation frequency and, rat, 247 psychosis, woman, 5906 therapeutic, 4280, 5349 Cat emotion, diencephalon and, 1765 frontal lobe lesion, 3325 killing impulse, 2910 fetus, behavior, 587, 990 learning, 189, 1208 neurosis, experimental, 5335 nystagmus, brain and, 59 reflex, auriculogenital, 5234 galvanic, cortex and, 5717 galvanic, cortex and, 5717 pupil, brain and, 1097 respiration, cortex and, 5700 respiration, correx and, 5700 thirst, 208 vision, acuity, 133, 1116 brain and, 1165, 1166 brain potentials and, 5122 brightness, 108 correx and, 3913 cortex and, 3913
movement, 111, 121
Cataplexy, animal, 1329
autonomic and, 4726
bird, 1334, 1879, 5261
emotion and, 775
frontal, 1900
Cataract, determinants, 2787
extraction, psychosis after, 4165
results, 2802
Catatonia, characteristics, 5963
diagnosis and prognosis, 2458
experimental, 298, 3317
cardiazol and, 4100
facial contractures, 2432
hormone and, 2489
mechanism, 4153
Cause, 3801
concept, child, 973, 2695 cortex and, 3913 concept, child, 973, 2695 negative, 6163 Cerebellum, 5126 ablation, 674 dog, 624 ablation, 074
dog, 624
monkey, 1065
unilateral, 648
after-nystagmus and, pigeon, 1071
atrophy, psychosis and, 2485
conditioning, 717
effects, cerebral potentials, 3337
locomotion and, 4073, 4174
nuclei, rabbit, 5138
atimulation, after-effect, 60
Cerebrospinal fluid, excitatory properties, 1085
Character, determinants, 3594
development, 1898
primitive, 2018
diagnosis, 1965, 1970, 3032, 6466
disorder, 1393, 2504, 2510
education, 2140, 2638, 3188, 6611
mental hygiene va., 3004
review, 5560
face and, 1480
handwriting and, 5422 face and, 1480 handwriting and, 5422 heredity, 2859, 3477 home and, boy, 1708 ideal and, 368 intelligence and, 1594 mental work and, 6598 personality and, 5388 physical education and, physical education and, 4338 Proust on, 2572 Prount on, 2572
significance, 855
study, 361, 1473, 3604, 6471, 6474
biography, 2494
camp, 5001
review, 6480
theory, 660, 6473
vocation and, 526
war effect, 5389
(see also Personality)
Chauffeur, see Driving

Cheating, see Honesty
Chemical sense, see Olfaction, Taste
Chick, see Bird
Child, abnormality, 313, 1666, 4404, 5928
bibliography, 949
France, 5563
review, 2693, 5042
usefulness and, 2188
abuse, 1597, 5073
prevention, 975
accident prevention, 1685
adjustment, 5934, 6463, 6620
maternal psychosis and, 5317
muscle tension and, 1701
parent relation and, 3200
school, 2112
social, 2174, 3217
animal, 1886 social, 21/4, 321/ animal, 1886 anxiety, 6130 appetite loss, 982 art, 2185, 3202, 5041 correlates, 584 determinants, 5609 fantasy in, 4442
orientation, 977
preference, 981
portraits, 4428
variation, 979
attitudes, 2166
sex differences, 3515
behavior, adult attitudes, 564, 2159, 3741
development, 5598
goal gradient, 5817
home and, 2684
organization, 5038
problems, 2687, 2690, 2955, 3528, 4403,
4414, 4420, 5076, 5605, 6126
camp and, 1686
characteristics, 6691
depression and, 5053
follow-up, 3230, 3764
prediction, 2692
review, 2670 fantasy in, 4442 review, 2670 Rorschach test in, 363 treatment, 5069, 5593 types, 1688 biography, 2181, 5033 body measurements, 573 Brazil, 6132 biography, 2181, 5033
body measurements, 573
Brazil, 61,32
reliability, 983
proportions, 3218
brain lesion sequelae, 5311
potential, 1079
British, American attitudes, 2001
care, 3187
bibliography, 3758
rating, 6594
car-sickness, 4405
Chinese-English, intelligence, 6507
perception, 1692
test results, 1691
clinema effects, 569
city, Germany, 980
color attitude, 5179
manipulation, 6683
weakness, 101
competition, 4274
concepts, 561, 1694, 1704, 6143
animism, 4408
cause, 973, 2695
name, 570
physical, 992, 1000
time, 5034
conditioning, 3970, 3972
behavior and, 3963
motor type and, 3978
constitution, 5044
convulsions, 4402
co-operation, competition, 3632
efficiency, 2525
crippled, 2681
education, 5006, 6089
review, 2682, 3250
speech training, 1990
crying, significance, 4431
deaf, speech, 6253
deaf-blind, 1796
deception, 968, 4440, 5032
delinquency, 913, 2062, 4292, 4943, 5476
Australia, 2596
France, 6057
incidence, 2064
treatment, 460, 908, 4279, 6055
dependent, placement, 2161 incidence, 2064 treatment, 460, 908, 4279, 6055 dependent, placement, 2161 diabetic, development, 6120

dominance, 559, 560 dreams, 3768 dreams, 3768 eidetic imagery, 728, 730, 1563 emotion, 1347, 1696, 2680, 3204 control, 3227 needs, 2158 shock, 2171 startle, 579, 580 environment, 3243 eye dominance, 3208 fantasy, 3213, 4430 story completion, 3610 test, 5976 frustration, 1346, 4697, 5383 reaction, modification, 583, 3767 gifted, 3224 adjustment, 2169 background, 4349 education, 2635 growth, 1703, 2675, 3206, 3231, 4398, 5606 lag in, 5622 mental, 993, 2190 personality alteration in, 6674 study, 5065 guidance, 272, 1707, 2668, 3167, 4147, 5954, 6142 142 Brazil, 480 California, 571 follow-up, 5037, 6698 Michigan, 2054 motivation, unconscious, 3082 parent and, 986, 5326 reading, 2023 school, 563 Sweden, 2175 techniques, 2189, 2679, 3233 fantasy, 1684 handedness, 220 handedness, 220
handwriting, 4905
hearing defects, 81, 87, 3384, 5798
fluctuations, 3868
hypophrenia, determinants, 5339
satiation in, 3225
selection and, 503
social maturity in, 1511
hysterical, 3223
blindness, 5222 hysterical, 3223
blindness, 5322
conditioning variation, 4655
illness, reaction to, 269
institution, mental hygiene, 3210
intelligence, 2170
adoption and, 3969
food and, 5611, 6693
growth, 3235 growth, 3235 parent alcoholism and, 5007 physical correlates, 3216 interests, 6676 physical correlates, 3210 interests, 6676 game, 4427 Japanese, picture appreciation, 5046 knowledge, 5078 teacher test, 6107 learning, detour, 5068 mase, 5215 alternation, 3981 motivation, 984 recall conditions, 2348 magic behavior, 3759 medicine, psychiatry and, 5941 moral concepts, 4426 judgment, 2163, 3219 motivation, 1676, 6685 motor ability, race difference, 3099 murder, 467, 1593, 3683 music interest, 3242 preference, 4438 preference, 4438 neurosis, 1430, 2689 hypnotic cure, 326 institutional, 856 obedience, 3044 orientation, 743 parent attitudes, 3237, 4441 relationship, 2160, 3239 personality, 997, 6135 development, 566 family and, 1500 picture analysis and, 5612 rating, 6475 study, 530 classroom, 6139 test, 967, 4838, 5391 play, 2193, 5604, 6675 groups, 574, 4429 material, 1677, 3766 choice, 3221

significance. 3209 symbolism, 98 poverty and, 6682 poverty and, 6682 power experience, 581 psychiatry, 2456, 2969, 3006, 3241, 4110, 5067, 5950, 6449 clinic, Denmark, 5599, 5602 conditioning and, 3937 congress, 3026, 3265, 4447, 5625, 5653, congress, 3026, 3265, 44
6435
1887, 1680
1887, 1680
1887, 1680
1897, 1680
1897, 1680
1897, 1687
1897, 1687
1897, 1687
1897, 1687
1897, 1687
1897, 1687
1897, 1687 problems, 3761 techniques, 1687, 2420, 6140, 6677 psychosis, 830, 4787, 4828, 5917 schizoid symptoms, 4779 psychotherapy, 2406, 2425, 2935, 3507, 3771, 5299, 5613, 6117, 6122, 6385, 6680, case, 4050 case, 4050
play technique, 3497, 5062, 5075
questions, 5603
radio and, 972, 5047
reaction time, 3464
race difference, 576
reading, 572, 2647
refugee, 6684 rejected, treatment, 3247 religion, 966, 2673 religion, 966, 2673 resistance to tests, 4409 rhythm, race and, 2186 runaway, 3119 security, 2688 sex delinquency, 470 habits, 1697 references, 6133 seduction effect, 166 seduction effect, sequetton enect, 1007 singing voice, 3619, 5425 sleep posture, 5058 social attitude, 6015 withdrawing, 6128 withdrawing, 6 behavior, 2672 maturity, 5990 organization, 6020 recognition, 575 work, 2674, 3672 work, 26/4, 36/2 space orientation, letters, 3762 relations, 5607 speech, 5050 Chinese, 1698 defect, 888 treatment, 437 development, 4270 loss, 297 sentence, 5045 sentence, 5045 siblings and, 1682 social function, 1693 training, 3068 spelling, 4988 sphincter control, 307, 3232, 6694 story, 3769 appreciation, 3770 study, observation, 6121 play and, 5596 record, 3249 record, 3249
suggestibility, 5070
symbolism, 4419
sympathy, 987
teacher transference, 528
testimony, 1852
dream and, 5281
thought, 3118, 3245, 3763, 4423, 4630, 5601
training, 577, 2164, 5035, 5071, 5620, 6629
nursery school, 3743, 4436
principles, 6137
punishment in, 6123 punishment in, 6123 speed, 1624 trauma effect, 3564 variability, 2182 variability, 2102 visual acuity test, 1109, 1828 adaptation, diurnal change, 102 defect, health and, 2307 defect, health and, 2307 hygiene, 1835 word association, 985 young, concepts, 4412 instruction forms, 6138 motor ability, 6134 sex differences, behavior, 3215 (see also Adolescence, Infant, Parent)

Chimpansee, avoidance and stimulus move-ment, 5243 behavior, rating scale, 6467 body potential and sex cycle, 2366 brain, 5719 body potential and sex cycle, 23 brain, 5719 co-operation, 3673 delayed response, 156 drug addiction, 1328 eye muscle recovery, 5231 frustration, 1416 imitation, 1198 infant, human vs., 4424 motivation, 226 insight behavior, 2879 learning incentive, 1197 mother, infant recognition, 4033 reward expectancy, 718 symbolic incentive, 149 testa, 3982 Chinese adoleocent, personality, 1501 characters, learning, 1196 child, perception, 1692 speech, 1698 testa, 1691 family, America, 2543 Hawaii, 4871 handwriting order, 3637 intelligence test, 1653, 1657, 1665 personality, family and, 2040 psychology, Han dynasty, 2758 tonemes, 6519 type study, 2512 Choice, monkey, 3938 path, rat, 715 type study, 2512 Choice, monkey, 3938 path, rat, 715 personal, factors, 4844 point behavior, 2349 taste, determination, 5506 point benavior, 2349
taste, determination, 5506
Chorea, emotion and, 304
Huntington's, 4798
heredity, 4178
psychosis with, 2462
Chronaxy, blood circulation disturbances, 3839
brain, 4509
conditioning and, 1751, 1849, 2858
determinants, 4523
drug effects, 3846
hormone effect, 4519
isochronism, 1762
labyrinth and, 4527
measurement, 4492, 4528
muscle, autonomic and, 2393
normal, 1761, 4675
ill va., 1774
pain, 3326, 6203
sensory, 4514 sensory, 4514 stimulus and, psychosis, 3854 subordination, 661 vision and, 4517 work, 2386 Cinema, conduct and, 569, 6525 ema, conduct and, 369, 5525 experience, 6622 industry, problems, 5533 principles, 887 recording, embryo behavior, 1022 time reversal, 1136 (see also Film) Circulation, see Blood City child, Germany, 980 crime distribution, 5487 differences, 2043 marriage rates, 5989 merita, opinion, 3113 eocial tensions, 391 Clairvoyance, see Parapsychology Clairvoyance, see Parapsychology Class attitudes, 5434 frequency effect, 1630 size, scholarship and, 508 social behavior, 4356 birth rate and, 4243 Climate, see Weather Clinic, child. Denmark, 5599, 5602 crime and, 909 directory, 5373 Indiana, 2226 problems, 3528 statistica in, 1020 statistics in, 1020 techniques, 1423 Clothing, motivation, 6503 Cold potentials, 6227 pulse, anxiety and, 5967 ensation, determinants, 1822 pregnancy, 74

College advertising, 2602 attitude aims, 533 change, 4244, 4883 curriculum, 506 change, 4244, 8563 curriculum, 506 efficiency, 4357 entrance requirements, 3169, 4996 graduate, birth rate and intelligence, 2051, 6547
vocation adjustment, 3747
intelligence, curriculum and, 5561
scholarship and, 6602
junior, ability required, 6091
language success, 547
mental hygiene, 1493, 1647, 4814, 5937, 6432, 6634
mortality, 6631
present success, 547 mortality, 6631
negro, psychology in, 3775
personnel, 1637, 1648, 4987, 6102
pronunciation test, 3073
reading materials, 5579
remedial, 6536
scholarship, medical school and, 3727
prediction, 538, 2137, 2624, 2632,
3716, 3737, 4991, 6106, 6109, 6600
seating and, 4998
suniformity, 6665
selection, 2117
social success, 4859
stereotype, 3627
study method, 6103
teacher, annoying habits, 3181 study method, 6103
teacher, annoying habits, 3181
reading, 497, 6100
vocational guidance, 549, 3726, 5018
preference, 945, 5014
word taboo, 4241, 4264
(see also Education, Student)
Colon, irritable, 3988
metility, sangling motility, ganglion control, 655 hypothalamus and, 5706 stomach reflex, 751
Color, acuity and, 3400, 4555, 5751
adaptation and, 4554
attitudes, 5179
brightness discrimination and, 689 brightness discrimination and, monkey, 682 change, fish, 4563, 6222, 6274 hypophysis in, 3474 light and, 6270 subjective, 3886 contrast, 1831 acuity and, 96 acuity and, 96
form and, 6254
hearing and, 5766
judgment, variability, 5857
manipulation, infant, 5052, 6683
mass, sex-age differences, 3906
measurement, 4557, 4586, 5161
mixture, 3919, 6249
preference, determinants, 3060
texture and, 5796
vitamin and, fowl, 3393
protective, 1806 vitamin and, fowl, 3393 protective, 1806 purity, wave length and, 5187 shock, Rorachach, 6483 theory, 3362 vision, 1791, 2791 adolescence, 2308 apparatus, 594 bird, 1807 brain lesion and, monkey, 5180 child, 101 crustacean, 92 defect, 4536 glycosuria, 3376 driving, 3144 fish, 1804 flashes, 1122 heredity, 687 hypnosis and, 5274 insect, 2295 limits, 2789 limits, 2789
monkey, 1132
persistence and, 4538
pressure and, 3920, 3921, 6266
rabbit, 117
tests, 115, 2847, 2848, 5785
type and, 1833
Comfort, industry, 2614
warmth and, 3406
weather and, 2887
Comic, see Humor Community, friendship structure, 413 planning, 456 size, news knowledge and, 2101

Compensation, cultural, 4851 Compensation, cultural, 4851 types, 5530 Competition, child, 3632, 4274 Composition ability, student teacher, 2108 achievement in, 6083 achievement in, 6083 adolescents, 5619 artistic, 6488 fantasy, 530 oral, teaching, 2125 written, stutterers, 387 written, stutterers, 387
Comprehension, reading, 1569
social, 6487
test, 1655
Compulsion, see Obsession
Concept, child, 1704
animism, 4408
cause, 2695
first-grade, 4412
physics, 1000
student vs., 6143
Conditioning, 4661, 5225
animal psychology and, 3295
brain potentials, 5143
cerebellar, 717
child, 3970, 3972
behavior and, 3937, 3940 child. 3970, 3972
behavior and, 3937, 3940, 3963, 5038
types, 3971, 3978
chronaxy and, 1751, 1849, 2858
concepts, 1856, 2857
configural, 185
control group in, 2861
cord stimulation, 3955
cortex ablation and, 2343, 4652, 4653, 5829
stimulation, 1226, 3954
discrimination, instruction effect, 3941
dog, 1229, 2341 dog, 1229, 2341 dog, 1229, 2341 drug effect, 1210, 2883, 3439 effect and, 3983 essential structures, 719 essential structures, 719 excitation vs. inhibition, 1213 flicker and, 5732 galvanic reflex, 3961 general stimuli, 1848 generalization, 3945 reinforcement and, 169 higher order, cat, 189 hormone and, 3428, 5220, 5221 incentive and, 2328 incentive and, 2328
insulin shock and, sheep, 5821
knowledge and, 5814
learning and, 1850
light, occipital lobes and, monkey, 5705
mathematical formulation, 1859
mase and, rat, 1265
measures, interrelations, 3414
memory and, 3423, 4647, 6282
motor point stimulation, 2864
muscle potentials and, rat, 1216
neurosis and, 1238 neurosis and, 1238 non-neural, 1225 olfactory, brain control, 5677 pattern in, 4628 physiology, review, 5810 psychiatry, 1461 psychoanalysis and, 1362 report and, 2334 response magnitude, 3430, 4628 senility and, 4702 senility and, 4702
dog, 4648
sensory, 716, 2855
stability, hysterical child, 4655
ex dominance and, rabbit, 1192
stimulus threshold, 1180
transformation, 3573
theory, 1205, 3443, 3976
time interval in, 3432, 3433
transfer, 1260, 2884
bilateral, 1221, 4638, 6287
twins, 3419
types, 1223, 2866
ultra-paradoxical phase, 3435 ultra-paradoxical phase, 3435 unconditioned stimulus effects, 1179 vascular, schizophrenia, 5343 Vincent curves, 166 volition and, 1228 withdrawal reflex, 2342 work effect, 3936 (see also Extinction, Learning) duct disorder, see Behavior Conduct Behavior problem, Conduct disorder, see Set Neurosis Conference, see Organizations Confict, cultural, 6522 crime and, 6569 personality and, 4842

Consc Consc

Conti

Contr

Co-01

Cord,

Corre

reaction, experience and, 1232 form, 1231 resolution, 1246 type and, 1357 resolution, 1246
type and, 1357
social, psychosis and, 4776, 5945
study, Luria method, 210
theory, 3416, 3853
(see also Frustration, Repression)
Congress, see Organizations
Conscience, feminine, 1358
Consciousness, 233, 605, 2210, 2219, 5896
brain potentials and, 70
concept, 3270, 3275
conditioning and, 2334
continuity of, 4443
Descartes on, 21
disturbance, 4765, 6395
trauma, 5933
nervous system and, 5275
Constancy, consistency and, 4591 Constancy, consistency and, 4591 size, 5774 speed, 6259
Constitution, adolescent, 1705
personality and, 3035, 3592
athletic, 1333
child, 5044
concepts, 1471
conditioning and, 3971
cranial defects and, 4096
crime and, 6570
heart and, 239
heredity and, infant, 2178
psychosis, 4120
hysteria and, 844
income and, 5077 speed, 6259 hysteria and, 844
income and, 5077
psychosis and, 834, 1472, 5924, 6388
race and, review, 342, 1535, 1536
types, 858, 1966, 3045, 5236
new, 5230
Contraception, see Birth control
Contrast, binocular, 5803
color, brightness, 1831
form, 2287
successive, 1827 successive, 1827
movement, 6317
taste, 5736
Co-operation, child, 3632
efficiency, 2525
chimpanzees, 3673
prisoner, 1598
social groupe, 5396
Co-ordination, basis, 4633
bimanual, 1215
industrial, 2073
drug effect, 5229
eyes, 4581
eye-hand, 2919
fish, 4007
for and hind limbs, ma successive, 1827 fish, 4007
for and hind limbs, mammal, 4008
social facilitation, 2932
Cord, anterior roots, monkey, 5690
asphyxia, reflex facilitation and, 5256
excitation and inhibition, 1052
heat mechanism, 5144
stimulation and, 5145
lesion, reflex and, 4143
syndrome, 1447
neuropil, 4507
potentials, 645
changes, 5120
section, fetus, 2772 potentials, 645
changes, 5120
section, fetus, 2772
results, 629, 3301
stimulation, conditioning and, 3955
Correlation coefficient limits, 2706
computation, 1005, 3261
nomograph, 34
contingency measure, 2745, 2761
covariance ratio distribution, 2720
nonlinear, 49, 1011
ratio, 3294
tables, 6150
theory, 1040, 2708, 3819
Cortex ablation, mammals, 4513, 5129, 5146
acidity, 6201
activity correlates, 3305
spread, 4505
adrenal, need adaptation, 1299
respiration and, 765
brightness discrimination and, 3877, 3882, 3913
catalepsy and, 3317
conditioning and, 3317 3913 catalepsy and, 3317 conditioning and, 2343, 5829 drug effect, 2241, 2262 epilepsy, 4144, 4806 facilitation and extinction in, 5683

function, monkey, 677
handedness and, 3327
hypophrenia, 5710
learning and, 735, 1098, 2335, 3957
localization, 3540
monkey, 633
maternal behavior and, rat, 1046
memory and, 4520
metabolism and, 663
nystagmus and, 59
optic, rabbit, 2264
orientation and, rat, 3881 optic, rabbit, 2264 orientation and, rat, 3881 potentials, deafferented, 3310 drug effects, 3309 frequency, 638 rhythms, 2769 pre-occipital, 6212 primate, 3853 primate, 3853 reflex, galvanic and, 5717 groaning, and, 1763 placing and, rabbit, 1743 pupillary, and, 1097 respiration and, 3332, 5700 sensory, monkey, 668, 709, 3315, 4533 pain and, 3335
speech centers, 3856
stimulation, 1099, 5680
after-discharge, 653
conditioning and, 3954
convulsions from, 5925
monotreme, 6192
primate, 5147, 5149
surface, 3849
temperature, 2249
thalamus ws. 5127 temperature, 2249 thalamus vs., 5127 touch and, monkey, 659 vision and, bird, 3336 nseling, bibliography, 6658 child, 2189 child, 2189
family, 2537
student, 1638
Country child, abnormality, France, 5563
hypophrenia incidence, 5956, 6416
leadership, 2042 hypophrenia incidence, 5956, 6416 leadership, 2042 life, depression and, 3103 mental hygiene, 1928 migration from, intelligence and, 5435 opinion in, 3104 personality in, 5457 psychosis care, 6414 vocational guidance, 2096 worker, industry, 2616 Creativity, environment limitations, 6075 philosophy of, 3284 senility, 4645 Cretinism, growth in, 2492 thyroid treatment, 1385 Crime, adolescent, 5493 parent alcoholism and, 4293 Sweden, 6563 alcoholism and, 5318 arson, determinants, 5490 parent alconolism and, 4293
Sweden, 6563
alcoholism and, 5318
arson, determinanta, 5490
attitude, press, 6575
social order and, 4940
culture conflict and, 6569
depression, 3130
detection, 484, 4949
determinants, 457, 468, 2053, 2060, 2061,
3679, 4286, 4294, 4482, 5481, 5494
distribution, Germany, 481
urban, 5487
education and, 486
fictional, 4942
genius and, 5485
habitual, 459, 3132, 6058, 6573
heredity, 4188
punishment and, 6574
woman, 911
handwriting and, 2050
heredity, 6059
Holland, 912
hypnosis and, 6054
hypophrenia and, 6570
incidence, 6452
magic and, 6560
maternal rejection and, 4205
migration and, 482
negro, 4946
old age, 3121, 3127
organized, 6553
orphans, 5483
Orientals, 4945
prevention, 325, 479, 4289, 5484, 6550
Brasil, 480

psychological testimony on, 4960 psychopathy and, 263, 1374, 1955, 2055, 3682, 4277, 5338, 6425 3682, 4277, 5338, 6425
race and, 4281
robbery, 5568
Rorschach and, 2059
seriousness scale, 6554
sex, 3120, 3122, 3126, 3128, 6567
alcoholism and, 477
Holland, 1591
hormone and, 4952
psychiatry and, 4954
study, bibliography, 2063
journal, 6148
methods, 1599
resistance, 910 journal, 6148
methods, 1599
resistance, 910
swindling, determinants, 5479
textbook, 2595, 5478
theft, collecting and, 5492
treatment, 909, 916, 2056, 3129, 3677, 4282, 4288, 4290, 4291, 4953, 5480, 5482, 6053
effects, 6552
New Zealand, 6549
Russia, 6558
theory, 6557
trend, New York City, 5497
woman, Germany, 472
treatment, 6559
(cripple, rehabilitation, psychiatry in, 3575
Crowd psychology, 2011, 3074, 4240
Crustacea, color vision, 92
muscle, excitation, 6353
inhibition, 4712
stimulation frequency, 6354
nerve impulse, 2258
muscle facilitation, 4025
noise production, 6353 muscle facilitation, 4025
noise production, 6353
orientation, 1874, 4542
phototropism, 138, 2296, 5159, 5800
Culture achievement distribution, 3666
anxiety and, 3034
art, handedness, 5420
compensation, 4851
conflict, 6522
Africa, 1578
crime and, 6569
personality and, 868 crime and, 6569
personality and, 868
contact, 5427, 6009
differences, 3655
integration, primitive, 385
lag concept, 5447
materials, outline, 6526
mental hygiene and, 4086
negro, Haitian, 400
personality and, 393, 2584, 4193, 4890, 6366
study method, 861 study method, 861 primitive, 6042 psychosis and, 314
types, 4903
(see also Anthropology)
Curiosity, infant, 2167
sex, 3505
Curiculum bibliography, 2095
effective, college, 506
gifted child, 2115
integration, 521
intelligence and, 4371
college, 5561
science, 6653
slow learners, 2106
Cutaneous, see Skin
Cyclothymia, 2465, 2471
atypical, 3530
constitution and, 1472
drug treatment, 2992 psychosis and, 314 drug treatment, 2992 heredity, 1387, 1398, 1401, 1451, 1452, 1453, 2469 hysteria and, 815 paralysis and, 6413 paratysis and, 1433 review, 267 syphilis and, 1433 (see also Depression, Mania) Day-dream, see Fantasy Deaf-mutism, see Pantasy Deaf-mutism, see Deafness Deafness, central vs. peripheral, 5769 child, 87 child, 87 heredity, 2853, 4124, 4614, 5177, 5749 high tones, 4551 inner ear, 1780 intensity in, 99 nerve potentials, 781 occupational, 1812

orientation in, 1304

partial, 4603 child, 3384, 5798, 6253 review, 2302 survey, 81, 4602, 4604 personality and, 112, 3859, 4207, 5786 review, 2302
survey, 81, 4602, 4604
personality and, 112, 3859, 4207, 57
review, 2306
speech in, 5782, 6253
child, 6029
testing in, 3899
toxic, 4597
training, auditory, 93, 106
song, 6514
sone, 6515
sone, 6516
sone, 6517
sone, 6517 opossum. 1220
Definition, operational, 1025
types, 3654
Delay response, chimpansee, 156
mase, 148, 5210
Delinquency, boy, 2589, 4276
association tests, 4950
characteristics, 4948
child, 913, 1590, 4943, 5476
Australia, 2596
France, 6057
treatment, 6055
determinants, 2062, 2593, 3676
enuresis and, 6686
Germany, 3124
girl, 4947, 6051
habitual, rates, 4292
hormone disorder and, 5495
hypophrenia and, 4185, 4186, 4285, 5477
India, 4287
intelligence and, 478, 2592, 5028, 5030
interests and, 5772
mental organisation in, 3678
Navy, 2058
personality and, 461, 1589, 3123, 3598, 3684, 6050, 6561
prevention, 464
Michigan, 2054 prevention, 464 Michigan, 2054 runaways, 1596 seriousness, 462 sex, child, 470 women, 4951 statistics, 2064 treatment, 460, 463, 908, 1595, 1600, 2590, 4279, 4944 4279, 4944
institutional, 458, 6056
New York, 3680
truancy, correlates, 6565
vocation guidance, 483, 2588
(see also Behavior problem, Crime)
Delusion, chronic, 4777
depersonalization and, 814
determinants, 4155
hallucination and, 4171
paresis treatment, 4158
reference, 1497
religion and, 5348
sex, 1915
(see also Hallucination)
Dementia, capacity and, 286 Dementia, capacity and, 286 child, 4828 child, 4828
concept, 4169
Dependency, church attitudes and, 3638
conflict, 3615
Depression, brain injury and, 3580
diagnosis, 4788
dynamics, 839
economic, behavior problem and, 5053
country life in, 3103

crime ia. 3130
family e.ad, 3112, 4229
marriage in, 2526
reading in, 1584, 3117
recreation in, 3110
religion in, 3076
social work in, 3056
galvanic reflex in, 5914
heredity, 1448, 3552
mood, 3601
paresis, 2467
perversion and, 2481 mood, 301
parrelle, 2467
perversion and, 2481
syndrome, 4760
time sense in, 5340
treatment, 2980, 3001, 5358
work capacity in, 4074
(see also Cyclothymia)
Depth perception, 127, 701, 1172, 2321, 3363
acuity and, 2810
apparatus, 3292
brain lesion and, 1154
film, 5200
Gestalt and, 706
monocular, 2316
parallax, anomalous, 1147
time, 5190
perspective, 85
rat, 707
review, 8756 rat, 707
review, 5756
time and, 1836, 2805
Development, see Growth
Dextrality, see Handedness
Difficulty determination, 553 Difficulty determination, 553 muscle potentials and, 6308 radio and, 4639 school subjects, marks and, 6085 test, 4391 Discrimination, brain and, primate, 6264 brightness, 90, 2813 brain and, 1068, 6279 brain and, 1068, 6279
cat. 108
chimpansee, 226
rat, 191
color vs. form, fish, 1804
conditioned, instruction effect, 171
retention, 6282
diffuse boundary, 2828
insight in, chimpansee, 2879
learning, pigeon, 1110, 1185
loudness, 94
movement, cat. 111 learning, pigeon, 1110, 1185
loudness, 94
movement, cat, 111
number, rat, 725
pattern, rat, 1121, 2821
pitch, fish, 137
theory, 8, 160
weight, rat, 3927
Discussion effect, 881
decision, 1577
technique, 4869
Disease, apoplexy, emotion and, 1891
arthritis, personality, 336, 337
anthma, determinants, 1371, 1413, 5961
psychoanallysis, 3490
autonomic and, 6215
autoscopy in, 323
inflammation, olfaction and, rabbit, 1803
mental factors, 289, 825, 2449, 3582, 4081,
4134 4134
pellagra, psychosis, 4066
psychosis and, 260
psychotherapy, 4106
pulmonary, mental aspects, 5341, 6376
personality effects, 831
rachitis diet, selection, rat, 1337
learning effects, rat, 194 learning effects, rat, 194
recovery, mental aspects, 1976
paychotherapy in, 5922
type, personality and, 1414
Wilson's, facial contractures, 24
Dissertations, education, 2629, 4322
Oklahoma, 2204, 2205
social work, 1984
sociology, 872, 6486
Dissociation, primitive, 1953
repression and, 4206
Distance, audition and, 3863
perception, see Depth
visual acuity and, 1159
Distraction, mental work and, 5207
music, reading and, 1997 music, reading and, 1997 reaction to, 2340 reaction to, 2340
Divorce, marriage age and, 5464
psychosis and, 6405
Dog, associations, 2341
brain anemia, 5694

cerebellum defect, 624 conditioning, 1229 cortex and, 5829 cortex and, 3829 old age, 4648 cortex ablation, 4513 experimental neurosis, 3431, 3569, 3570 treatment, 3567, 3568, 3571, 3572 hunger and memory, 3429 hunger and memory, 3429 imitation, 1332 number discrimination, 1188, 1190 oxygen need, 2893 pulse modification, 1885 self training, 163 sheep care, 3480 spinal, 1063 spinal, 1063 subcortex, 1077 talking, 5203 token reward, 1201 tone complex response, 1189 Dominance, child, 559, 560 feeling, 339, 354 correlates, 1478 group, personality and, 6508 intelligence and, 383 race, 399 sex, conditioning and, rabbit, 1192 social, 1994 social, 1994
mouse, 4268
(see also Laterality)
Drawing, adjustment and, hypophrenics, 3028
child, 2185, 5041
determinants, 5609 fantasy in, 4442 orientation, 977 orientation, 977
variation, 979
growth in, 4227
mirror, training and, 1556
perception and, 1554
twins, 5984
(see also Art)
Dream, child, 3768, 4430
testimony and, 5281 Dream, child, 3768, 4450 testimony and, 5281 contents, 811 determinants, 1368, 1369, 1899 falling, labyrinth and, 6245 interpretation, 2945, 5278 case, 5294 neurosis and, 1365 primitive, 389, 397, 435 psychosis and, 317, 6439 psychotherapy and, 5908 significance, 4061, 6365 symbolism, 2944 theory, 4735, 5284, 5291, 5899 Drive, child, 1676 concept, 4032 food, drug effect, 206 interrelations, 195, 2886 learning and, rat, 3932 pregenital, 2410 thirst, cat, 208 vocation choice and, 4388 sealth accumulation, 3491 vocation choice and, 4388 wealth accumulation, 3491 (see also Instinct)
Driving accidents, 4304, 4310, 4968, 5503, 6076 iving accidents, 4304, 4310, 44 determinants, 4311 pedestrian in, 5501 prevention, 4297 proneness, 3135 age and, 4955 alcohol and, 5535 attention and, 3703 bibliography, 3694, 4316 braking time, 4296 carbon monoxide and, 4301 clinics, 6066, 6067 color vision, 3144 correlates, 6584 correlates, 6584 fatigue, 920 field analysis, 6071 firemen, policemen, 600 handwriting and, 1524 improvement, 6068 remedial training, 4298, 4317 remedial training, 4296, 4317 research, 4974 tank, 5528 tests, 491, 2599, 3133, 3693, 4308, 4961, 5818, 6074, 6592 high school, 4299 types, 492 vision and, 3702 blind spot, 2613, 3151 Drug addiction, 3522 age and, 5242 argot, 6564

CE

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m

01

ac A bi

C

Ci Ci Ci

CI

di

pi ec su (s Eating Educa

Ear, b

chimpanzee, 1328 Coleridge, S. T., 5966 food and, 5248 rhythm, 5707 theory, 2989 treatment, 3547, 5496 woman, 5935 woman, 5935 bulbocapnin, catatonia, 1446 caffein intoxication, 3007 curare, learning and, 1209 theory, 787 effect, 1873 ct, 1873 activity, rat, 240 autonomic, 3848 brain potentials, 631, 2773, 3309, 5687 brain potentials, 631, 2773, 3309, 56 bromine, inhibition, monkey, 1303 coffee, alcohol, 6342 chronaxy, 3846 conditioning, 1210, 2883, 3439 cortex, motor, 2262 rabbit, 2241 differential inhibition, monkey, 4616 face muscles, 1276 food drive, 206 labyrinth, 4587 learning, rat, 733 light reaction, insect, 4578 light reaction, insect, 4578 muscle contraction, 6302 function, 4135 nerve centers, 6218 -muscle conduction, 1756, 3825, 6198 6198
response, 2247
olfaction, rabbit, 1801
personality, 3595
reaction time, steadiness, 5229
refiex excitability, 6194 galvanic, 3482 knee, 5141 respiration, 757 sex cycle, rat, 4696 sleep, psychotic, 330 synapse conduction, 4524 thirst, 2888 thirst, 2888
tobacco habit, 903
mescal hallucinations, determinants, 5778
resistance, sex function and, 5226
treatment, cyclothymia, 2992
(see also Alcohol, Benzedrine, Carbon
dioxide, Hormone, Oxygen, Tobacco) Ear, basilar membrane, width, 3924 cochlea, combination tones and, 1125 cochiea, combination tones and, 1125
map, 1124
mechanics, 4582
nerve, endings, 3828
potentials, 683, 2256
intensity and, 2322
model, 2286
salt effect, 135
theory, 3879, 3897
lesion, taste effects, 1800, 2324
heredity and, 4595, 5198
inner, anomalies, 3908
lesion effects, 2820
touch in, 5185
muscle contraction, 2323
sound conduction and, 3925
organ of Corti, ablation, 2817
pupil reflex and, 3403
sound conduction, 712, 2851, 3894
suppuration, auditory threshold in, 3344
(see also Hearing) sound conduction, 712, 2851, 3894
suppuration, auditory threshold in, 33(see also Hearing)
Eating, see Food
Education, activity, 2122, 2658, 3172
measurement, 2122
scholarship, 3180
adult, 5214, 5577
auditory, deaf mutes, 106
Australia, 2623
bibliography, 3729, 6663
camp, behavior problems, 1686, 2168
character study, 5001
Canadian, bibliography, 5375
case study in, 4432
character, 566, 2140, 2638, 3188, 6611
CCC, 6636
coeducation, factors, 5060
crippled child, 5006, 6089
critique, 4373
custodial, cuine and, 486
discipline-in, 3054
dissertations, 2629, 4322
eminence and, 4921
emotion in, 3734

eathetic, 2575
experiment in, 4329, 4363, 5015
freedom in, 1623
Germany, 5436, 6505
gifted, child, 2635
growth and, 5004
guidance, 1639, 2118
hypophrenia, 1615, 2447 2950, 6088, 6099
individual differences and, 4413
psychology and, 940, 954, 957
industry and, 5532
institutional, duration, 4381
leader, origin, 898, 1998
learning and, 3935
marketing, 5519
measurement, 1629, 4327
meeting, 1643
work book, 2110
mental hygiene and, 3171, 4167, 4375
Montessori method, 4994
music, 5540
bibliography, 502 esthetic, 2575 music, 5540 bibliography, 502 research, 4348 negro, bibliography, 6607 nurse, 1425 nurse, 1425 parent, 3187 peace, 3739 personality, 3712, 4215 philosophy, 2634, 4986 physical, 6606 character effect, 4338 measurement, 936, 941 preschool, review, 4989 primary, review, 5004 problems, 2707 primary, review, 3004
problems, 2707
psychoanalysis and, 3502
psychological, interneship, 5109
psychology and, 3157, 6613
textbook, 3717, 3735, 3736, 5555, 6649
race distance and, 3451
radio and, 543, 5003
research, 2109, 3742
bibliography, 6621
history, 4328
selection in, 525
sex in, 3709
social aspecta, 2123
settlements, 1620
work, 3662
special, 518, 949, 3749, 6626
Switzerland, 1619
teacher training, 3746, 3748
statistics and, 3794
strategy, 2642
teacher, bibliography, 4346
theory, 535, 546
therapeutic, 6612
transfer value, 1644
transients, 443
negro, 951
visual, textbook, 519
vocational, 495
Germany, 3697
India, 5539 Germany, 3697 India, 5539 Germany, 3697
India, 553, 1628
(see also Class, College, Curriculum, High school, Teacher, Training)
Efficiency, laboratory, 3696
mental, metabolism and, 2906
Ego development, 1343, 1352
philosophy, 1978
refutation, 596
splitting, 294
unconscious and, 1359
Eidetic imagery, 810, 4625
critique, 1245
foresight and, 3437
hallucinations and, schizophrenia, 316
race differences, 728, 730, 1563
testimony and, 186
Electric characteristics, cell nucleus, 747
effects, nerve conduction, 3837
system, 5692
impedance, nerve, 6199
stimulation, musele, 6309, 6329
Embryo, see Fetus Embryo, see Fetus Eminence, education and, 4921 race and, 6540 race and, 6540 Emotion adjustment, 1436 age, income, 395 child, 1696 laterality and, 6351 prostitute, 6532 test, 3438 adrenalin and, 1298, 4824

apoplexy and, 1891 art and, 800 blood content in, 4674, 5836 brain and, 3329, 3455 cataplexy and, 775 child, 2680, 2955, 3204 chird, 2680, 2955, 3204 chorea, 304 control, child, 3227 diencephalon and, film, 1765 diuresis and, 5260 diuresis and, \$260 education and, 3734 effects, 763 esthetic, 6544 expression, music, 896 examinations, 3448, 3449, 3993 eye defect and, 3381 galvanic response and, 3450 growth, 991 heart rate and, psychosis, 5968 imagination and, 799 imagination and, 799 indignation, moral, 4258 introspection, 2370 judgment, 1297, 1320 learning and, 5877 maturity scales, evaluation, 4836 maturity scales, evaluation, 4 memory and, animal, 3998 review, 2333 menstruation and, 2378 mimicry and, 1948 muscle contraction and, 5833 music, 1566 respiration and, 1878 needs, child, 2158 panic, army, 6005 nession, types, 782 passion, types, 782 perception and, 768 physiology of, 779, 854, 1371, 1887, 2923, 5257 effects, 4038 portraval, 3811 positive and negative, 1728 problem child, treatment, 5593 problem child, treatm psychosis, 3013 reprieve effects, 3125 romanticism, 894 shock, child, 2171 speech and, 6512 shock, child, 2171
speech and, 6512
stereotypy and, rat, 761
susceptibility, heredity, rat, 4002
tendencies, factor analysis, 4195
tension and, 2892
test, ball and field, 5586
thalamus and, 2374
theory, 790, 1326, 3999, 4714, 4715, 5876
history, 753
thought and, 764
volition and, 770
zones, Head's, 3907
(see also Startle)
Employment, adolescence, 922
age and, 918
application forms, 2606
rating, NYA, 1609
Encephalitis, intelligence effect, 4079
psychosis in, 5371
sequelae, 2988, 3336, 4094
review, 2693 sequelae, 2988, 3536, 40
review, 2693
subacute, 2484
(see also Parkinsonism)
Endocrine, see Hormone
English ability, 4992
learning, factors, 5019
pronunciation, 6545
Bengali, 4219
teaching, 6633
Hawaii, 6609
review, 5576
test, 5543
(see also Composition) test, 5543 (see also Composition) Ennui, see Boredom Enuresis, 307, 833, 2678, 2683, 5074 case, 3212 child, 3232 correlates, 1479 delinquency and, 6686 delinquency and, 0080 determinants, 824, 6678 sleep and, 6343 treatment, 2233, 2935, 6687 Environment, 4449 child, 3243 ecological, Hawaii, 3652 heredity and, 5866, 6555 group intelligence, 5808 intelligence and, 568, 5966 infant, 3201

neuroticism and, 856
perception and, 2784
lepsy, aphasia equivalent, 4750
Binet pattern, 4084
brain potentials, 321, 1408, 4778, 5930
characteristics, 4148, 4151, 4807
cortex and, 4144, 4806
stimulation, 5925
hypochondria and, 4107
intelligence growth and, 1429, 2981
music response, 3523
myoclonus, familial, 4124
nerve heat and, 4749
review, 2693 Epile review, 2693
Equilibrium, center of gravity in, 762
fish, 1137 fish, 1137
rotation test, 229
Error, average, 5670
determinants, 175
lapse, determinants, 2909
standard, 1722, 1723, 1726
time judgment, 86
Esthetics, 4250, 4255
bibliography, 5409
congress, 2762 congress, 2762
determinants in, 1509
education, 2575
emotion in, 800, 6544
experience, 904, 1572
experimental, 6488
India, 4908
judgment, adolescence, 6625
measurement in, 1510, 3618
musical, 5472
object in, 5413
psychology and, 5104
textbook, 2569
theory, 392, 878, 1509, 2551, 5419, 5754
(see also Art)
mation, see Judgment Estimation, see Judgment Ethics, 3822 ics, 3822 concepts, 4242 child, 4426 defect, 4790 duty, wish vs., development, 340 ideal, character and, 368 genesis, 2936 indignation, 4258 indement, adolescence, 5055 judgment, adolescence, 5055 child, 2163, 3219 magic, 6013 magic, 6013
acience, 2568
social psychology of, 5462
Ethnology, see Anthropology
Eugenice, 1516
activities, 450
asse, 3050
legislation, 4700
objectives, 2566, 6535
Euphoria, see Mood
Evolution, 2723
human, 3289, 4503
mental, 2729, 4450
acial, 4494 racial, 4494 statistics and, 3798 racial, 4494
statistics and, 3798
Examination emotion, 3448, 3449, 3993
motivation value, 5547
pattern response in, 4336
reliability, 4353
school, 4341
Excitation, conditioned, permanence, 1213
decrease, sensory nerve, 57
inhibition and, 1048, 4646
cord, 1052
muscle, 4016
narcosis and, 2259
plant, 1096, 5193, 5890
Exercise, see Work
Experiment, adjustment to, 1410
design of, 4460
psychological, 3256
Expression, 2372, 4000
judgment, 1973
Extinction, central nervous system, 660
conditioning, 3962, 4650 conditioning, 3962, 4650 cortex, motor, 5683 delay vs. strength, 6294 generalisation, 154 incentive and, 2328 rate, interval and, 184 resistance to, 1264 subgoal and, 6277 (see also Conditioning) Extraversion, see Introversion

Eye, albinotic, flicker fusion and, 4552 bird, 109, 3867 re, aibinotic, flicker fusion and, 4552
bird, 109, 3867
conjunctiva, end organs, 2801
co-ordination, 5856
accommodation and, 1785
disorders, 4581
cornea sensitivity, 1821, 4572
defect, 107
emotion and, 3381
endocrine, 4014
heredity, 1792, 2290, 3880, 4595
rat, 1134
hypophrenia, 1950
psychogenesia, 3895
reading disability and, 6237
treatment, 2806
dominance, 4607, 4683, 5763
brain laterality, handedness, 2268
child, 3208
test, 1869 child, 3208
test, 1869
vision span and, 1150
fatigue, 3387, 3898
growth, 4721
determinants, 1322
heredity and, 6239
iris, bird, 4598
lens formation, 1129
lid eversion, 3885
light absorption, 6256
diffusion, 696
movement, 1286, 1786
animals, apparatus, 2766
review, 3405
brain lesion and, 1091
disturbance, 223, 2297
learning, recall, 1259
paralysis and, 1108
reading, 441, 3115, 3360, 4899, 4926,
6943 6043
speed, 4930
training, 6538
muscle balance, altitude and, 126
correction, 2852
evolution and, 3903 reading speed and, 1840 recovery, chimpansee, 5231 training, 6267 pain, 3385 protection, short-wave light, 1158, 2294 protection, short-wave light, 1158, 2294 strain, industry, 5524 vegetative function, 4589 vitamin deficiency and, 1776 (see also Fovea, Nystagmus, Pupil, Retina, Vision) Face contracture, catatonia vs. Wilson's disease, 2432 expression, judgment, 1973 recognition, 4634 Facilitation, central, 660, 1067 cortex, motor, 5683 inhibition and, 1051 nerve-muscle junction, 1755 Factor analysis, 30, 36, 1018, 2217, 3276, 5641, 5654 attitude scales, 5098 comparison, 6157 component significance, 2721 critique, 3440, 4445 errors, 30 group voting, 4469 intelligence, 2191 selection and, 3974 memory, 194
memory, 194
method, 2724
neuroticism, 2507
temperament, 4195
tests, 1716, 3755, 3756
textbook, 2228
loadings, practice and, 4666
perceptual, 6181
theory, 2664, 2701
intelligence, 2344
weighting, Alpha test, 6668
Fallure attitude, monkey, 1211
child, 5383
attitude modification, 583, 3767
muscle potential and, 6308
Faith, see Religion
Family, aged persons in, 1528 raitn, see Religion
Family, aged persons in, 1528
American, 5985
attitude, similarities in, 423
background, high school, 6105
scholarship and, 3164
transient, 5051

broken, personality and, 1500 child and, 2160, 2684 Chinese, America, 2543 Hawaii, 4871 Hawaii, 4871
personality in, 2040
counseling, 2537
depression effects, 3112, 4229
farm, 2523
mental hygiene, 4230
Mormon, 2517
negro, urban, 2538
neurosis, 2424
personality and, 1708, 2496, 2515
Russia, 2534
selection, colonies, 2604 Russia, 2534
selection, colonies, 892
slum clearance effects, 4862
value changes, 2536
(see also Marriage) Fantasy, constancy, 4643 dirt, 1363 domination, 5307 elicitation, adolescent, 5080 child, 1684, 5976 cloud pictures, 2345 color blot, 3039 composition, 530 drawing, 4442 story, 3213 completion, 3610 family, hysteria, 5378 intolerable, 3576 life, child, 4430 mechanism, 4831 myth and, 6363 suicide and, 5266 (see also Imagination)
Fatigue, action potentials, 244 adrenal cortex treatme auditory, 2309, 4549 industrial, 4588 industrial, 4588 aviation, test, 2075 brain cells and, mouse, 1045 driving, 920 drug effect, 774 eye muscles, 78, 3387, 3898 industrial, 1870, 2601, 5521, 5536 mechanism, 5891 mental, 1257, 3471 metabolism in, 4667 nerve stimulation and, 2384 poises and 2080 noise and, 2080 oxygen and, 1279 oxygen and, 1279 reaction time and, 2377 respiration and, 4682 retinal, 75 schizophrenia, 4766 sclerosis, 1945 schizophrenia, 4766
sclerosis, 1945
steadiness and, 6344
swimming, 1872
theory, 787
toxin, growth and, 2895
transfer, bilateral, 4626
unilateral, 1283
crossed effects, 5842
urinary inhibition in, 219
vibratory, 4608
work conditions and, 796, 4727
repetitive, 497
(see also Adaptation)
Fear, control, 1732
delinquent boy, 3131
determinants, 3994, 5867
stimulus movement and, chimpanzee, 5243
empathy, 5211
Feeble-mindedness, see Hypophrenia
Feeling, see Emotion
Fertility, see Birth rate Fertility, see Birth rate Fetus activity, 2925 cat, 587 rabbit, 990 cord growth and, 5715 determinants, 5614 intelligence and, 5615 recording, 1022 cord transection, 2772 development, bird, 4012 eye lens, 1129 eye lens, 1129
film, chick, 585
human, 1699
heart rate, variability, 5697
muscle-nerve relation, 1061
pressure stimulation, 1281
respiration, 996, 5832, 5873, 5 86
chick, 586

Film.

m
ps
re
te
(s
Finger

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vi

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pe

Folie à

Food, a

lac

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tai tai (se Foot pe Forems sel

Forget

Flicker all an

Film, diencephalon and emotion, 1765 fetus, chick, 585 human, 1699 human, 1699
heredity, 5858, 5859
magic, 6030
psychological, review, 3255
reproduction, depth perception, 5200
teaching, 6111
(see also Cinema)
Finger prints, quintuplets, 1702 Finger prints, quintuplets, 1702 twins, 4029 Fish, audition, 5195, 5797, 6236 brightness and flicker, 5156 color change, 3474, 4563, 6222, 6274 ear, 6238 color change, 3474, 4563, 6222, 6:
ear, 6238
equilibrium, 1137
form discrimination. 1804
hormone reaction, 5844
labyrinth, 2854, 4573
learning, 1266, 1341
detours, 3973
nerve tracts and, 1861
light sensitivity, 710
locomotion, 4007, 4690, 4705
maternal behavior, 3475
nerve, antidromic response, 1769
system, 1058
transmission, 1770
refiex, resistance, 4691
spinal, 4692
respiration, 2375
sex cycle, light and, 217
social behavior, 3659
swim bladder receptors, 6255
temperature reaction, 1119 social behavior, 0393
swim bladder receptors, 6255
temperature reaction, 1119
tone discrimination, 137
tropism, 4687, 6241
galvanic, 4535
visual purple, 1106
Flicker, adaptation and, 6272
albinism and, 4552
area and, insect, 2281
brightness and, 2280, 3869
fish, 5156
conditioning and, 5732
diagnosis by, 1127
objective vs. subjective, 3861
peripheral, 104, 697
retina potential and, 1105, 1789, 1845
scotoma, 6263 scotoma, 6263 temperature and, 4553 threshold, 1131, 5733 determinanta, 2839 modality and, 1146 determinants, 2839
modality and, 1146
perseveration and, 5731
type and, 1145
Folie à deux, see Paychosis, communicated
Folk dance, Rumanian, 6493
lore, determinants, 4224
dream and, 1365
fantasy and, 6363
German, 2557
Moses legend, 2539, 6361
paychosis and, 1579
song, cradle, motivation, 1581
(see also Magic)
Food, activity and, yeast, 6324
behavior determinants, Planaria, 1331
infant, personality and, 1689
inhibition, 3513
protosoan, 5247
psychosis, 2965
drive, drug effects, 206
drug addiction and, 5248
intelligence and, 4640
child, 5611, 6693
lack, effects, 1296
lection and child, 5611, 6693
lack, effects, 1296
learning and, 141
rat., 4618
memory and, dog, 3429
olfaction and, rabbit, 1802
quantity, effect, 4013
schedule, infant, 5039
selection, ape, 4670
chick, 6327
protesoan, 4671 chick, 6327 protozoan, 4671 rachitis and, rat, 1337 taking rate, rat, 207 taste and, 1818 (see also Vitamin) Foot position, 4017
Foreman, function, 2082
selection, 2081
training, 2079 Forgetting, practice distribution and, 152

Form board norms, 2154, 3199 race difference, 1855 race difference, 1855 color and, 6254 manipulation, infant, 5052 modification, sensitivity, 1799 perception, 703, 6231 fish, 1804 fish, 1804 lizard, 1155, 2283 monkey, 2318 size vs., 1843 thermal, 1168 type and, 1833 preference, infant, 5043 Foster, see Adoption Foster, see Adoption Fovea depression, significance, 2850 function, 6231 inhibition, 1149 vision, vertebrate, 97, 4568 Fowl, see Bird Fowl, see Bird
Frequency distribution, 1031, 2718, 4448, 4484
Frequency distribution, 1031, 2718, 4448, 4484
comparison, race data, 5643
contingency table, 6180
curve fitting, 2744, 2746, 2911, 4471, 4490
social phenomena, 5995
tables, 6150
normal, 4475
Friendship, opinion and, 1588
structure, community, 413
Frog. see Amphibia
Frontal lobe, chimpanzee vs. man, 6220
lesion, 6419 lesion, 6419 cat, 3325 cat, 3325 monkey, 649, 1072, 1767, 3320 Rorschach in, 869, 1443 schizophrenic response, 310 spasticity and, 1757 therapeutic, 646 review, 1081
Frustration, child, 1346
chimpanzee, 1416 conomic, reaction, 3005 motivation and, 365, 802 rat, 1254 (see also Conflict, Repression) rat, 1254
(see also Conflict, Repression)

Gait, see Locomotion

Ganglion control, colon excitability, 655
Impulses, 1752
isolation, 5679
potentials, optic, insect, 1738
transmission, 630, 1057, 5696, 5703
blood and, 626, 2239

Gastro-intestinal, see Colon
Genetics, see Heredity
Genius, see Ability, superior
Gestalt closure, recall and, 2348
threshold, 1112
critique, 598, 1717, 3269, 3290
depth perception, 706
motion in, 3361
time and, 708
philosophy and, 3792
qualities, 17
source book, 6151
theory, 25, 1026, 3815
word formation and, 5815
Gesture language, 2567, 4876, 6010
Giftedness, see Ability, superior
Girl apprentice, vocational preference, 6097
delinquency, 486, 4947, 6051
employee testa, 3695
growth, 3234, 5060, 6695
high school, destiny, 3732
sex development, 6359
Goiter, twins, 5316
ulcer vs., 4159
Grades, see Marks
Gradient, bud formation, hydra, 1330
goal, child behavior, 5817
Grammar, implications, 2555
placement, 4358
stuttering and, 3052
Graphology, see Handwriting placement, 4358
stuttering and, 3052
Graphology, see Handwriting
Grasping, analysis, 6178
infant, 4416, 4417, 4418
rat, 1308
brain lesion and, 1282
vertebrate, 5258
Group attitudes, 4904
insect, 214
judgment, reliability, 4909
mysticism, 5943
relations, confidence and, 6508
superiority, task and, 5825 superiority, task and, 5825

theater, psychology, 4261 theater, psychology, 4261 theory, social, 4901 work, rhythm, 2891 (see also Social) Growth, adolescence, 1679, 1695, 3252 auditory, opossum, 1815 behavioral, amphibia, 4731 child, 5598 child, 5598 brain nutrition and, 2898 potentials and, 5148 child, 2675, 5065, 5591, 5606 lag in, 5622 psychiatry, 2184 concept, 6136 cretin, 2492 cycle, 3207 cycle, 3207 duty-wish relations, 340 education and, 5064 eye, determinants, 1322 fatigue toxins and, 2895 function, 3220 girls, 3234 infant, 6672 instinct and, 1884 intelligence, 1203, 1662, 2190, 3244 epilepsy and, 1429, 2981 status and, 442 epilepsy and, 1429, 2981 status and, 442 norms, optimal care and, 6690 organs, 2704 personality, 5040 ratio, heredity, 2669 sentiments, 991 speech, child, 4270 tobacco and, rat, 1239 tonsils and, 6700 visual acuity, cat, 133
Guilt feelings, 3046
inferiority and, 4044 innocence assertions and, 5486 Habit, heredity, 150, 162, 3929, 3959, 3960 radio, 4924 response, rat, 1261 response, rat, 1261
training, psychosis, 3015
(see also Learning)
Hair color, temperament and, 352
movement, 6299
Hallucination, 845, 2479
alcoholic, 3002, 3588, 4115
brain and, 300, 3553, 4816
creativity loss and, 2429
delusion and, 4171
determinants, 4116, 4149, 6397
eidetic imagery and, schizophrenia, 316
hemianopic, 293
introspections, 5345 introspections, 5345 labyrinth and, 4792 Lilliputian, 334 mescal, determinants, 5778 mystic, 6000 mystic, 6000
paresis treatment, 6411
schizophrenia, 4783
sieep and, 2986, 4781
(see also Delusion)
Handedness, see Laterality
Handwriting, accident proneness and, 6018
character, intelligence, 5422
child, 4905
connections in, 1902, 6444 child, 4905 connections in, 1992, 6044 criminal, 2050 diagnosis, 4886, 5437, 5466 Klages, L., 3667 systems, 5469 validity, 2520, 2586 disability, 4323 disability, 4323 driving and, 1524 energy in, 3660 genealogy and, 2564 imitation, 6032 labyrinth stimulation and, 3364 case, 4794
order, Chinese, 3637
personality and, 3049, 4837, 6037
pleasure, 2457
pressure and speed in, 6048
process, 1586
psychosis, 432
recognition, 1993
sex and, 2562
teaching, 534
twins, 5424, 6007
type and, 4232
vocational guidance and, 6662
tic, see Tdylch loss, 1938 Haptic, see Touch

Hard of hearing, see Deafness, partial Head size, intelligence and, 582 trauma effects, 5933, 6453 psychosis, 5374 re-education after, 4146 acte, 2963 ache, 2963
psychogenic, 4190
Health awareness test, 514
education, review, 5552
myopia and, child, 2307
(see also Disease)
Hearing acuity, 79, 3348, 4571
adolescence, 2326
child, 3868 adolescence, 2326
child, 3868
constancy, 2808
fatigue, 4549
middle ear suppuration, 3344
rat, 6244
testing, 1114, 2794, 2797, 3346, 3409,
3874, 3917, 4588, 5802
speech, 3396
therapy and, 88
apparatus, 3802
aviation and, 5163
bone conduction, 1816
brain lesion and, 1240, 4530
cochlea response, loudness and, 2322
color and, 5766
conservation, school, 1787
development, opossum, 1815
distance perception, 3863 development, opossum, 1815 distance perception, 3863 fatigue, 2309 fish, 5195, 5797, 6236 structures, 6238 galvanic adaptation and, 3996 insect, 3345 light effect, 695, 1810, 1811, 6234 localization, 139, 5686 blind, 6232 brain and, 2832 loudness discrimination, 1847 brain and, 283z
loudness discrimination, 1847
duration and, 3408
measurement, 1784, 2834
meaning and, 5789
mechanism, 3912, 5162, 5172
middle ear and, 712
motor reaction and, 1275, 1284
musical, 6033
theory, 4541
nerve mechanism, 2824
pathways, 621
potentials, 673, 2256
brain stem, 1151, 1152
reptile, 3857
noise and, 5755, 6235
old age, 1824, 5158
pitch discrimination, 1144, 3353
post-operative, 3351, 3888
pupil reflex and, 3403
review, 2552
sleep and, 700
sound conduction, 693
stimulus, internal, 4605
own voice, 4885
theory, 907
time phenomena, 2323, 5737
tone properties, 5176
tympanum and, 1779, 3925
weather and, 1808
(see also Deafness, Ear)
Heart, acetylcholine effect, 754, 755
activity, frog, 5893
infant, 4410
music and, 5262
constitution and, 239
rate, acceleration, muscle reflex, apparatus, 250, 5092 loudness discrimination, 1847 duration and, 3408 rate, acceleration, muscle reflex, 3985 apparatus, 250, 5092 cold and, anxiety, 5967 control, 639, 647 emotion, in psychosis, 5968 exercise, 6300 fluctuation, 788 fluctuation, 788
modification, dog, 1885
pain and, schizophrenia, 1390
prison psychosis, 5367
recall and, 4664
sex, difference, stuttering, 4907
sound, recording, 1731
Heat adaptation, 95, 1148
stimulus duration and, 2804
vascular correlates, 1823
changes, brain, 5136
stimulation and, 5142
cord, 5144
stimulation and, 5145 stimulation and, 5145

form perception by, 1168 nerve potentials, 6227 pain, cornea, 1821 sensitivity, 2298, 2814, 2815, 3889, 4566, 5174
vision and, 5872
Hemeralopia, see Adaptation, dark
Heredity, acquired characters, 5219
agricultural interest, 3078
anxiety state, 3552
art ability, 2577
brain potentials, 2775 brain potentials, 2775
character, intelligence, 2859
chorea, Huntington's, 4178
chromosomes in, 3473
color blindness, 687
constitution, infant, 2178
crime, 6059
habitual, 4188
cyclothymia, 1387, 1398, 1401, 1451, 1452, 1453 1453 deafness, 2853, 4614, 5177, 5749 defects, 3018 depression, 1448 ear, 4595, 5198 ear, 4595, 5198 educability, 2856 emotionality, rat, 4002 environment and, 5866, 6555 group intelligence, 5808 eye defects, 1134, 1792, 2290, 3880, 4595, 6239, 6273 film, 5858, 5859 film, 5858, 5859
growth ratio, 2669
habit, 150, 162, 3929, 3959, 3960
hypophrenia, 268, 276, 1437, 1456, 3545, 4823, 5305
intelligence, 2874, 3969, 3477, 5209
language study and, 5017
linkage determination, 1474
mongolism, 5957
myopia, 3892
neurosis, 842
paresis, 3017
plant ageotropism, 6251 paresis, 3017 plant ageotropism, 6251 psychopathy, 2474 apparent, 4101, 4102 psychosis, 324, 834, 1389, 1435, 1911, 2991, 4120, 4773 involutional, 2437 review, 2990 Wilson's, 5370 reading disability, 6423 regeneration and, 3928 royal, 1533 schizophrenia, 302, 1466, 4830 social maturity, 273 social maturity, 273 study, 6167 critique, 3468 significance, 3071 statistics in, 6424 trends, 6347 stuttering, twinning, 374 taste differences, 1115, 5760 theory, 5458
visual defect, bird, 2812
vocation and, 495
(see also Eugenics)
Hibernation, bird, 245 hedgehog, 2931, 6348 hormone, hypnosis, frog, 218 lethargy and, 4028 High school achievement test, 4365 hool achievement test, 4505
behavior problem, personality an
\$009
college scholarship and, 2632
driving tests, 4299
family background, 6105
graduates, follow-up, 3732
occupational adjustment, 1631
intelligence estimate, 1617
interest, 2651
leadership, 6533
parent attitude, 510
personality and, 6608
personnel, 1637
psychology, 956
reading, 593
disability, 4979
interest, 1646
materials, 5579
remedial, 500, 505, 2100, 2142
scholarship, success and, 4370 behavior problem, personality and, scholarship, success and, 4370 student opinion, 2625

study method, 4339 superstition, 3752

teaching methods, 6100 test practice, 2119 Home, see Family Homicide, see Murder Homosexuality, 1575, 1576, 2012 determinants, 2461, 2480, 3504 erotomania, 6400 passive male, 4175 primitive, 2533 Sweden, 3022 Honesty, 4226, 6465 determinants, 3072 student, 515, 3714 Hormone, anxiety and, 777 catatonia and, 2489 chronaxy effect, 4519 climacteric and, 1325 male, 4022 conditioning and, 1210 correlations, 5861 disorder, 5854 delinquency and, 5495 eye symptoms, 4014 myxedema, thyroid treatment, 3020 review, 2693 effects, 1339 effects, 1339 hibernation, hypnosis, frog, 218 insomnia and, 1876 maternal behavior and, 1307, 3467 parathyroid, calcium intake and, 2926 psychosis and, 4082, 4752 review, 3574 sex behavior and, 196, 1272, 4694, 5250, 5263, 5843 sex behavior and, 196, 1272, 4694, 5263, 5843
crime and, 4952
fish reaction, 5844
sympathin, hypothalamus and, 658
(see also Adrenal, Castration, Hypophysis, Thyroid, Vitamin)
Humor, adolescence, 3038
theory, 793, 4055, 4917
Hunger, see Food lack
Hydrocephalus, sex precocity and, 5921
treatment, intelligence and, 5222
Hypnosis, animal, see Cataplexy
autosuggestion and, 2399
brain circulation, 1318
potentials, 1055
color vision and, 5274
crime and, 6054
hibernation, hormone, frog, 218
metabolism effect, 2379
psychoanalysis and, 4062
regression, 1375
relaxation and, 4047
salivation, 2411 relaxation and, 4047
salivation, 2411
technique, 4057
therapy, 326, 2473, 2941, 4825
unconsciousness during, 5897
work and, 243
Hypophrenis, 512, 3566, 4070, 6391
adjustment and drawing, 3028 adjustment and drawing, 3028 adult, test performance, 1400 army, 4309 birth lesion, 285 rate, 6382 brain lesion and, 2770 potentials, 62, 3549 capillaries in, 3584 care, 325, 1396, 4071, 3550, 4746 extra-institutional, 1397 history, 1378 institutional, 3542, 3590, 4122 Massachusetts, 2959 relesse consequences, 5334 Massachusetts, 2959
release consequences, 5334
Scandinavia, 3023
South Carolina, 1464, 1465, 4754
case studies, 3544
chemistry of, 5940
child art, 584
choice in, 292
cortex in, 5710
delinguency and, 1593, 4185, 4186 cortex in, 3710 delinquency and, 1595, 4185, 4186, 4285, 5477, 6570 determinants, 4078, 5959 diagnosis, 327, 1427, 1458, 2127, 3581. diagnosis, 327, 1427, 1458, 2127, 3581, 5304, 5331 Sweden, 1949 education in, 1615, 2106, 2447, 2950, 3525, 3538 adolescent, 4320 classification, 6088 environment, 4105 eye defect and, 1950

id

ty vo w (s Hypor in

pe re re re se vi Hypot

pe st Hyster

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ts

lip

mm

16

to

n: re no th

Image

Imagi

Idiot. Illness Illumi

growth arrest in, 275 heredity, 268, 276, 1437, 1456, 3545, 4823, 5305 5305 idiot, movements, 3531 incidence, 5913 rural, 5956 Sweden, 5312 laterality and, 6307 rural, 5956
Sweden, 5312
laterality and, 6307
moral capacity, 4790
physique, 2452, 2973, 3537
reading disability, 3725
teaching, 3554
reflex abnormalities, 5932
review, 5929
rural determinants, 6416
schizophrenia va., Rorschach, 1444
Scotland, 3524
sex linkage, 4085
skin disorder and, 5368
social ability, 274, 1384
speech training, 3577
statistica, value, 3555
treatment, 1919
Italy, 2448
types, 5323
vocabulary teaching, 3586
vocational training, 3557
will training, 6099
(see also Mongolism)
Hypophysis, color change and, fish, 3474
innervation, 1749
ovulation and, rabbit, 2246
personality and, 6332
removal, degeneration following, 640
retinal pigment and, toad, 114
review, 5880
sex activity and light, 3446
vision and, 3319
Hypothalamus, adrenin and sympathin, 658
intestine activity and, 5706
personality and, 5905
stimulation, 635, 1760
Hysteria, 1954, 2441
anesthesia, 2483
aphonia, recovery, 1925
attitudes, 2984
blindness, child, 5322
brain potentials in, 6221
child, 3223
conditioning variation, 4655
concept, 3008, 6402
constitution and, 844
conversion, 3025
cyclothymia and, 815
determinants, 1939, 4141, 5319
hospitals, 2444
hyperventilation, 2970
instinct and, 836
mood swings, 5378
primitive, 1963 hyperventilation, 2970 instinct and, 836 mood swings, 5378 primitive, 1963 regression, 2961 schizophrenia and, 1421 symptoms, paresis, 2486 theory, 5356 theory, 5356 types, 2956, 3607 work ability, 4097 Idiot, see Hypophrenia Illness, see Disease Illumination, see Brightness, Light Illusion, amputation, 5773 blindness, 1107, 3862 lighthouse, 2282 magnetic eye, 5738, 5753 lighthouse, 2282
magnetic eye, 5738, 5753
micropsia, psychoanalytic theory, 4737
movement, 1175, 3386
Müller-Lyer, Gestalt and, 3369
oculocentric, 118
reality and, 5097
reversible, practice effect, 2825
susceptibility, 5194
touch, 125, 2293
visual, 1130, 2287
weight, hypophrenia, 2442
Imagery, after-image, attitude and, 1844
latency, brightness and, 1813
negative, source, 77
muscle-potentials, 781, 5885
nature, 729
repetitious, 5271
schisophrenia, 5916
threshold and, light, 5743
olifaction, 5744
Imagination, emotion and, 799
self in, 4473

test, 2345, 6669 test, 2345, 6669 theory, 731 will and, 4467 (see also Fantasy) Imbecile, see Hypophrenia Initation, child, 5068 chimpanzee, 1198 dog, 1332 dog, 1332
Immigration, see Migration
Impotence, see Sex
Inanition, see Food lack
Incentive, see Motivation
Income, achievement, intelligence, 5048
birth rate and, 6502
intelligence, 6124
cities, 447 cities, 447 effects, 6497 child, 6682 intelligence and, 478 growth and, 442 high school pupil, 6105 physique and, 5077 student, 6641 physique and, 5077
student, 6641
welfare and, 6041
Indian, abnormality incidence, 5342
intelligence, verbal vs. nonverbal, 3064
law, 476, 4931
mongolism, 3012
personality, 886
scholarship, 398
religion, 4874, 6027
social work, 2561
society, 3649
weapon, significance, 5416
Individual differences, education and, 4413
practice effect, 4656
social psychology, 1555
psychology, 840, 3489, 5088
crime and, 915
education and, 940, 954, 957
evolution and, 614
medicine and, 601, 617
sex disturbance and, 812 education and, 940, 954, 957
evolution and, 614
medicine and, 601, 617
sex disturbance and, 812
Individuals, Aall, A., Featschrift, 3818
Adler, A., biography, 5088
obituary, 2, 593, 1010
Angell, J. R., portrait, 595
Ballard, P. B., biography, 3711
Bentley, M., portrait, 595
Carrara, M., obituary, 53
portrait, 533
Carus, C. G., biography, 3652
Christiaens, A. G., portrait, 1041
Coover, J. E., obituary, 5637
DeBusk, B. W., obituary, 3287
portrait, 3287
Dix, D., biography, 40
Donaldson, H. H., obituary, 3777
Dwelshauvers, G., obituary, 2713
Farrand, L., portrait, 295
Ferrero, L., obituary, 488, 4493
Forel, A., biography, 1720
Fryer, D., portrait, 2615
Gadelius, B., obituary, 4488
Ghosh, S., obituary, 4488
Ghosh, S., obituary, 3778
Herrlin, A., obituary, 3254
Husserl, Descartes and, 4
Impalloment, biography, 364
Klages, L., biography, 3651
Kroeber, A. A., Festschrift, 412
Kroh, O., biography, 1021
Müller, G. E., obituary, 600, 607
Pace, E., biography, 5624
Pavlov, I. P., obituary, 1001, 1205
Prince, M., biography, 5100
Robinson, E. S., obituary, 1710
Seligman, C. G., Festschrift, 2047
Sergi, G., biography, 502, 512, 6153
Twardowski, K., obituary, 202, 7
Twardowski, K., obituary, 202, 512, 6153
White W. Stern, W., obituary, 5628
Stumpf, C., obituary, 27, 1024, 5102, 6153
Twardowski, K., obituary, 5083
White, W. A., obituary, 37, 1044, 3776
portrait, 1044
Woodworth, R. S., portrait, 3969
Industry, adjustment, 919, 2091
administration, 5502 attitude in, 2518 cinema, problems, 5533

co-operation in, 3147, 4312
co-ordination, bimanual, 2073
education and, 5532
estimate, high school, 1617
fatigue in, 1870, 2601, 5521, 5536
grievances in, 5529
intelligence test in, 494
labor turnover, 6080
motivation, 3141, 3156, 5504
music in, 929
personality in, 3154, 3155
personality in, 3154, 3155
personality in, 3534
planning in, 5512
profit sharing in, 2076
psychology in, 496, 926, 2086, 2612, 5523
Russia, 5537
training, 3142, 5505
psychotherapy in, 5531
rural worker in, 2616
selection tests, 3690, 4300, 6072 co-operation in, 3147, 4312 selection tests, 3690, 4300, 6072 social factors, 4315 social factors, 4315 suggestion scheme, 5518, 5526 time study, 5517, 5522 ventilation, 5499 vision in, 5197, 5524 (see also Paychotechnics) Infant behavior correlates, 2177 norms, 3211 organization, 995 review, 2676 blood content, race difference, 5608 care, 3226, 4400 chimpansee vs. human, 4424 motivation, 226 chimpanzee vs. numa, 4424
motivation, 226
constitution, heredity, 2178
curiosity, 2167
death rate, Austria, 4411
experience, psychoanalysis, 1373
face reaction, 978
food, personality and, 1689
sleep, 5039
form preference, 5043
colber and, 5052
grasping, 4416, 4417, 4418
growth, 5591, 6672
heart action, 4410
intelligence, environment and, 3201
learning, detour, 5057
locomotion, 558
mental hygiene, 4422
mother relation, 4437
motor phenomena, 4401 motor phenomena, 4401 play, 6141 play, 6141 posture, assistance and, 5595 reflexes, 2694 premature, 2172 umbilical cord loss, 4425 psychology, 3229 reality, adaptation, 5270 reality adaptation, 5270 sleep depth, 2187 smell, taste, 5621 startle, 1681
plantar response and, 567
sucking, breathing vs., 4434
disinhibition, 4435 temperature variation, 562 training, 2165 vision, 2162 training, 2165
vision, 2162
Purkinje phenomenon, 3228, 3236
size constancy, 1678
(see also Child, Fetus)
Inferiority feeling, 343, 3597
determinants, 4843
plastic surgery and, 862
guilt and, 4044
Information, child, 1694, 5078
community size and, 2101
cultural, measurement, 6101
reading and, 4350
student, 4357
Inheritance, see Heredity
Inhibition, central, 72, 1067, 2271
conditioned, permanence, 1213
crustacean muscle, 4712
eating and, 3513
excitation and, 1048, 1051, 4646
cord, 1052
external, 4631
foveal, 1149
gastro-intestinal, 2394
general, 1050
heart, 1269
infant sucking movements, 4435
monkey, bromine effect, 1303, 4616 infant sucking movements, 4435 monkey, bromine effect, 1303, 4616

neuromuscular, 1754, 1755 neurosis, experimental, 3434 reflex, 1319, 2245 removal, 3432 temporal, 4637 voluntary response, 4636 retroactive, 5216 age and, 157 intelligence, 1857 associative value, 5224 recognition and, 1863 reminiscence and, 182 similarity in, 183, 4663 sympathetic and, 1080 sympathetic and, 1080 theory, 787 urinary, fatigue, 219 Innervation, see Nerve supply Insect behavior, 213, 1301, 1324, 3425, 3481, 3986, 6333 sect behavior, 213, 1301, 1324, 3425
1986, 6333
brightness discrimination, 3887
blood sugar, 2355
castes, 83
color change, experimental, 1336
vision, brightness and, 2295
dark adaptation, 5153
flicker response, 3869
eye area and, 2281
ganglion potential, optic, 1738
groupings, 214
hearing, 3345
instinct, 2388, 2389
light reaction, 1139, 4612
drug effects, 4578
mimicry, 246
nervous system, 5688
olfaction, vision, 1143
orientation, 2336, 4594, 6248, 6316
population, 880
sense, 4577, 4599, 4613
chemical, 116
organs, 1142
suspension in water, 769
faste, 3873 suspension in water, 769 taste, 3873 tropism, 4610 tropism, 4610
development, 2275
vision, 4565, 5201
Insight, abstraction and, 3965
behavior, chimpansee, 2879
critique, 176
rat, 177
monkey, 159
psychologist, 5673
Insomnia, see Sieep loss
Instinct, 605, 2173, 2391
abnormal, 1395
bird, 6331
concept, 249, 1324, 1865, 187 bird, 6331 concept, 249, 1324, 1865, 1875, 3472, 4031 growth and, 1884 insect, 2388, 2389 intelligence and, 4004 killing, cat, 2910 law and, 3661 maternal, 235, 773 satiation, bird, 4706 schisophrenia, 6386 transformation, psychoanalysis, 3521 materiani, 253, 776
actiation, bird, 4706
achisophrenia, 6386
transformation, psychoanalysis, 3521
(see also Drive, Motivation)
Instruction, conditioning and, 171, 3941
form, child, young, 6138
(see also Teaching)
Insulin conditioning and, sheep, 5821
gastric motility and, 2373
treatment, 3539
brain potentials and, 2257, 3318
Integration, 1734, 6477
intelligence and, 4138
Intelligence, adult, 5577
age and, teacher jud, sent, 4374
allergy and, 994, 5202
animal, morphology and, 3931
aphasia, 1934
arithmetic and, 6652
basal age and, 1664
bensedrine and, 2871
bilingual children, 1219, 2024, 2030, 3930
birth control and, 231
rate and, 1988, 5208, 5306
college, 2051, 6547
income, 6124
brain potentials and, 1076
size and, 3850, 5121
character and, 1594
Chinese-English children, 6507
college va. non-college, 2117
correlates, first grade, 999 college vs. non-college, 2117 correlates, first grade, 999

curriculum and, 4371
college, 5561
deafness and, 3899
decline, 5223
maladjustment and, 6692
social effects, 4228
delinquency and, 478, 2592
dominance and, 383
dwarfism and, 4665
encephalitia effect, 4079
environment and, 3966
infant, 3201
estimation, 531, 2170, 5217
photographe, 4307
teacher, 4629
factor analysis, 2191, 3197
selection and, 3974
theory, 2344, 2878
fetus activity and, 5615
Fiji, 414 fetus activity and, 5615
Fiji. 414
food and, 4640, 5611, 6693
foster child, 3969
group, beredity vs. environment, 5808
growth, 993, 1203, 1662, 3244, 4630
epilepsy, 2981
income and, 442
handwriting and, 5422
head size and, 582
heredity, 2859, 2874, 3477, 5209
high achool, 1617
Holland, 3097
Holland, 3097
Holland, 3097 Holland, 3097
hydrocephalus treatment and, 5222
Indian, verbal vs. nonverbal, 3064
instinct and, 4004
integration in, 4138
learning and, 589
migration and, 4245, 5435, 6006
modification, 568, 732, 6292
motor ability, social facilitation, 3984
music and, 3648, 3664
nature of, 181, 1235
norms, 3806
nursery school effects, 4436
parent alcoholism and, 5007
perception and, 5775
physical correlates, 3216 perception and, 5775
physical correlates, 3216
practical, 1612
premature birth and, 1902, 2947, 4399
prisoner, 469, 4275, 6571
prostitute, 6532
psychology marks and, 4376
psychopathy and, 4065
quintuplets, 1670
schizophrenia, 1376, 1392, 3016, 6442
quotient, constancy, 2872, 3950, 4660, 6667
preschool, 578
race difference, 1855
radio and, 4639
retroactive inhibition and, 1857 radio and, 4639 retreactive inhibition and, 1857 scho aneity and, 511, 959, 2102, 2650, 3731, 5948, 5558, 6092, 6110, 6650, 6670 scholer, 6091, 6602 school are and, 2141 sex difference, 2663, 3946 sit lings and, 4260, 5819 sit lines and, 4260, 5819
specch training and, 2862
student knowledge of, 5010
teaching success and, 4361
test, 550, 555, 3754, 4396, 5590
Alpha, revision, 961, 6668
assumptions, 5204
attitudes, 2114
Chinese, 1653, 1656, 1657, 1665
construction, 2662
Ebbinghaus, 557
first grade, 1654
Goodenough, 1663
group, 4651
immigrants, 874 Goodenougn, 1003
group, 4651
immigrants, 874
India, 1649, 1659, 4392
industry, 494
Kent, 965
Kuhlmann-Binet, 960
non-verbal, review, 6671
personal constant, 1651
Pintner-Paterson, 1658
reading ability in, 6113
reliability, 2179
Rumania, 5024, 5026
school, 2126, 5542
Spanish, 2153
Spearman, 2147
speed in, 5824
teachers' use, 6096
validity, 6603

tonsils and, 6700
twins, 5827
types, 2873, 4041
variation, 5030
delinquency, 5028
vocabulary and, 4992
(see also Ability, Form board)
Intensity, see Brightness, Weight
Interest, adolescents, 1668, 4204
agricultural, heredity and, 3078
child, 561, 6676
game, 4427
radio, 972
delinquent boys, 3131
development of, 991
high school, 2651
personality and, 5393
psychologists, 4464
reading, 2021
sales ability and, 6061
school lessons, 2633
student, 2129
negro, 3175
survey, 4841
vocational guidance and, 4364
test, 6657
college personnel, 1648
psychiatric vs. sociological, 1449
rapport in, 5016
summary, 917
Intoxication, bee poison, 4686
caffein, 3007
carbon monoxide, 6381
lead, 270 carbon monoxide, 6381 lead, 270 resistance, sex activity and, 6296 threshold, reaction time at, 4020 (see also Alcohol, Drug) Introspection, emotion, 2370 status, 2712 status, 2712
Introversion, brain potentials and, 2253
concept, 2495, 5381
knee jerk and, 3033
neurosis and, 344
Intuition, psychotherapy, 168
testing, 2661
Invention, classification, 6293
process, 2870
Invertebrate, echinoderm, locomotion, 4713
groupings, 3098
hydra, bud formation, 1330
learning, 2880
light reaction, 5182 light reaction, 5182 metabolism, 1287 nerve excitation, 6216 impedance, 619 starfish, behavior, 1289 (see also Arthropod, Crustacea, Insect, Mollusk, Worm)

Kines

Klepto Knee Know

Kurto

Labyr

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Langu d F

re

(see also Arthropod, Crustacea, I Mollusk, Worm)

Job, see Vocation

Journals, Altersprobleme, 4474

Amer. J. Psychol., history, 2705

Arch., chil. Crim., 6148

Confinia neurol., 5669

evaluation, 2626

Growth, 26

Irrenpflege, 3271

J. abn. soc. Psychol., 4444

J. Neurophysiol., 2710

Psychologists' League, 12

race hygiene, Germany, 3286

Rev. Neuro-Psiquial., 3779

Rev. Psihol., 4497

Rev. Psihol., 4497

Riv. Psicol., index, 1730

Sociometry, 43

Voc. Guid. Dig., 4479

Z. Altersforsch., 5623

Z. Arbysychol., 2753

Judgment, absolute, 130

absurdity, 3975

affective, 1320

art., suggestion, 4920

attitude and, 4849

bakers, 5515

character, 1965, 1970

constancy, 2288, 4539

direction, 178

ethical, adolescence, 5055

facial expression, 1973

group, 1508

reliability, 4909

intelligence, 531

teacher, 4629

length, 6269 length, 6269 modality and, 1217 personality, expressive behavior, 4835 proprioceptive, 98 suggestion effect, 440 suggestion effect, 440 time, 86, 1798 performance, 5742 rat, 694 visual, vibration and, 1163 (see also Rating)
Juvenile, see Adolescence, Child

Kinesthesis, apparatus, 6177
Kinship behavior, primitive, 884
Kleptomania, 3492
Knee jerk, see Reflex, patellar
Knowledge, possibility, 47
relations, conditioning and, 5814
theory, 18, 31, 620, 2231, 2749, 3274, 3296, (see also Information) Kurtosis distribution, 2735

Kurtosis distribution, 2735

Laboratory efficiency, 3696
Florence, 4463
Indiana, 2222
Iowa, 1034
Milan, bibliography, 6165
Northwestern, 2214
Labyrinth, ampulla and, 711
autonomic and, 2899
blood pressure and, 4021, 6305
chronaxy and, 4527
cortex pathways, 1721
drug effects, 4587
falling sensations and, 6245
fish, 2854, 4573, 6236
giddiness, 4040
hallucination and, 4792
handwriting and, 3364
lesion, primate, 622, 2894
rat, 1842
muscle impulse and, 2352
phenomena, trumpeters, 4006

muscle impulse and, 2352 phenomena, trumpeters, 4006 psychosis, 4793 reaction time, 3987 reflexes, 251, 3487, 4039 sacculus function, 4562 stimulation, 2889, 3461, 6265 deaf mutes, 2853 sea-sickness and, 4681 sound, 5788 vertigo, 2439 test, past pointing, 4172

test, past pointing, 4172
vision and, 6430
(see also Equilibrium)
Language, 2567, 4470, 4882
deafness and, 3859
French, tense system, 890
tonemes, 3467
function, 3102, 3822
gesture, 4876, 6010
Hottentot, phonetics, 4850
intelligence and, 960
learning, 142, 2622, 2627
heredity and, 5017
mathematics and, 2860
mixed, 4911
newspaper, 3643

newspaper, 3643 preference, unconscious, 4934 publications and, 3264 rhythm, 6517 rhythm, 6517
schizophrenic, 5375, 6390
scholarship, college, 547
science and, 6510
secret, drug addict, 6564
self and, 6515
teaching, 6025, 6647, 6648
review, 5581
thought and, 3422
time and, 429
(see also Billingualism, Grammar, Speech,
Word)
Larynx, artificial, 901
function, speech, 2006

Larynx, artificial, 901
function, speech, 2006
investigation, history, 2027
(see also Voice)
Laterality, art, culture, 5420
bibliography, 6313
brain, 3327

agnosia and, 5949 potential and, twins, 67 child, 220

distribution, 5232

emotional instability and, 6351 eye, 4607, 4683, 5763 face-hand, personality and, 5871 hand, 3479 hypophrenia and, 6307 intercorrelations, 2268 measures, 746
psychosis and, 6306
review, 2693, 6312
reading and, 952
speech disorder and, 1515, 1868, 2010, 2573, 3620

work efficiency and, 744
Law, beliefs about, 371
criminal, 4912
Russia, 6558
Indian, 4931
enforcement, 476
instinct in, 3661 juror psychology in, 6528 motive in, 6529

enforcement, 476
instinct in, 3661
juror psychology in, 6528
motive in, 6529
psychiatry and, 4755, 5489, 6451, 6551
Germany, 3088
psychology and, 3096
psychosis in, 1920
crime and, 6425
social science and, 4894
Leadership, adolescent, 6533
education, source, 1998
prison, 4941
revolution, 3085
rural, 2042
structure, 402
Learning ability, adult, 5214
heredity, 2856
amphibian, 1182
apparatus, 5667
associative, 161, 1196
concept, 143, 2881
conditioning and, 1850
contrast effect, 723
cortex and, 1098, 2335
auditory, 1240
curve, 188, 1236, 1248, 1862, 2885
Vincent, 4632
definition, 2329, 2337, 3958
delay effect, 1243
detour, brain and, 2868
child, 5057, 5068
fish, 3973
discrimination, pigeon, 1110, 1185
drug effect, curare, 1209
rat, 733
effect, 4621, 4623, 4624, 4642, 4658, 4659
knowledge of results in, 5809
memory span and, 5807
non-informative cue, 3934, 3967
punishment, 144, 146, 1202, 1207, 1214, 1251, 6283
reward and, 1256
for success, 3939, 6291
reward in, 1206
emotional factore, 1224
judgment and, 5877
eye movements in, 1259
fish, 1266, 1341
insect, 1301
insight, chimpanzee, 2879
intelligence and, 589
interference, 147, 2346
machine, 1187, 2877
maze, 734
child, 5215
choice determinants, 1193
cortex and, 7at, 735
ideational, 1195
patterns of the first and the first and

choice determinants, 1193 cortex and, rat, 735 ideational, 1195 pattern and, 2863

pattern and, 2863
practice distribution, 5822
menstruation and, 179, 727
methods, 4615
mollusk, 4662
motive, 153
child, 984
chimpanzee, 149, 1197
rat, 141, 3932, 4618, 5205
motor, plateau in, 1302
rest and, 2876
shock effects, 5826
nerve pathways, fish, 1861
perception and, 2825, 3952
plateau, 3420
presentation form, 4983
speed and reminiscence, 3944
primate, 155, 1853
review, 1860

prose, 5820 recognition disturbances, 1237 retention and, 173

retention and, 173
long interval, 1234
rickets effects, rat, 194
school, 3935
arithmetic, 4326
examination effect, 721
language, 142, 2622, 2627
music, 4915
radio and, 4619
reading, 4852
teacher's presence and, 2120
sensorimotor, 1215
sensory control, 3942
set in, 2339
size sequence, 2880

sensory control, 3942
set in, 2339
size sequence, 2880
social stimulation, rat, 1258, 1514
theory, 160, 2867, 2869, 3953
Thorndike, critique, 3964
tobacco and, rat, 1239, 1241
transfer, 4369
trial and error, 3424
rat, 2865
tropism and, 6328
variability, 1230
vertebrate, 6278
vitamin B and, rat, 714, 1252
(see also Conditioning, Discrimination,
Forgetting, Habit, Insight, Maze, Memorry, Practice, Recall, Recognition,
Retention)

(see also Conditioning, Discrimination, Forgetting, Habit, Insight, Maze, Memory, Practice, Recall, Recognition, Retention)
Lie, see Deception
Life, artificial production, 3282
characteristic, 1977
conduct of, 360, 1032, 2513, 6152, 6166, 6190
course, aspects, 5094
history questionnaire, 4196
human, characteristics, 1732
length determinants, 4716
tobacco and, 2922
Light absorption, eye, 6256
glass, 5635
activity and, insects, 4612
rat, 3992
blood pressure and, 6352
system and, 3359
brain potentials and, 3838
diffraction, pinhole, 2291
diffusion, eye, 696
energy, daylight, 3858
vision and, 105
exposure apparatus, 4466
eye protection from, 1158, 2294, 2608
flash, hearing threshold and, 695, 1810, 1811, 6234
fog penetration, 4564
intensity, flicker and, 3869
for work, 5795
mysticism and, 4023
phobia, 2827, 5779
pupil entry point, 2314
reaction, crab, 138
eclipse, animals, 1174
fish, 710
insect, 1139
drug effect, 4578

insect, 1139 drug effect, 4578 drug effect, 4578 invertebrate, 5182 plant, 2823, 4550 protozoan, 698, 1837 time relations, 5777 worm, 1113, 1169, 4600

time relations, 377
worm, 1113, 1169, 4600
reflection measurement, 3412, 3864
reflex and, 1275
rhythm, 2793
school, 1825, 3375
sex cycle and, 3446
bird, 3991, 5151
fish, 217
rat, 4695
turtle, 3995
signals, 681
threshold fluctuation, 78
imagery and, 5743
tonus and, 1819
Limen, see Threshold
Literature, adolescence, 989
appreciation tests, 6003
character theories, 2572
child, 3769

child, 3769 citations, 4462 form, review, 4902 love in, 6047

nonsense, determinants, 5290 persuasion in, 5440

poetry, anxiety and, 4738 psychoanalysis, 4739 test, 2033 psychoanalysis and, 1372, 2415, 2422, 3668 psychology and, 370, 379 race in, 5414 psychology and, 370, 379
race in, 5414
romantic, emotion, 894
style recognition, 378
symbolism, 4223
Localization, cortical, 5697, 5711
feelings, 3926
hearing, 139, 3413, 5686
blind, 6232
brain and, 2832
mental activities, 3847
proprioceptive, 103
visual, binocular vs. monocular, 117
egocentric, 1103
touch vs., 1162
Locomotion, adult, 211
cerebellum and, 4073, 4174
corpus callosum and, 3841
disorder, ataxia, cortical, 3540 disorder, ataxia, cortical, 3540 echinoderm, 4713 infant, 558 muscle section and, rabbit, 2930 review, 3990 review, 3990
running, movement order, 5865
physiology, 243
walking, force components, 6310
Longevity, see Life length
Love, essays, 3628
impulses, 2938
infantile, 1343
literature, 6047 literature, 6047 need, 2985 need, 2985 neurotic, 288 philosophy, 871 thought and, 451 Luria technique, see Association-motor Magic, adolescence, 3251, 5618 child, 3759 delinquency and, 6560, 6572 ethics, 6013 film, 6030 high school, 3752 identification, 6489 modern, 1549 primitive, 453 psychological, 3293 sources, 415 sources, 415
theory, 1582
verbal, 3190
weapons, 5416
Maladjustment, see Adjustment
Mammal, accommodation, 3860
adrenal removal, marmot, 745
auditory growth, opossum, 1815
behavior, bear, 2338
deer, 5240
horse, 3705
brain and vision, 1068
captive, movement, 6321
cerebellar nuclei, rabbit, 5138
conditioning and insulin shock, sheep, 5821
co-ordination, 4008 conditioning and insulin shock, sheet co-ordination, 4008 coriex ablation, 5146 monotreme, 5192 defense mechanism, opossum, 1220 domestication, 6320 experimental neurosis, pig, 1391 sheep, 5350 fatigue effects, mouse, 1045 hibernation, hedgehog, 2931, 6348 olfaction and sex, guinea pig, 1314 primitive, vision cella, 4580 respiration development, 4668 retima, 6258 social behavior, 3612 dominance, mouse, 4268 social behavior, 3612
dominance, mouse, 4268
(see also Cat. Dog. Rabbit, Rat)
Mania, outcome, 1428
senile, 1431
treatment, 5324
Manic-depressive, see Cyclothymia
Market distribution, 3699
preferences, 4975
research, 4957, 4959, 4971, 5500
field, 4958
inventions, 4962
reliability, 6973
validity, 6587
training, 5519
Marks, academic vs. vocational, 3722

college, prediction, 2624 scating and, 4998 distribution, difficulty and, 6085 gymnastics vs. studies, 1633 halo effect, 2093 gymnastics vs. studies, 1633
halo effect, 2093
intelligence and, 6092
knowledge, effects, 1618
major and, 2649
organisation, 2652
persistence and, 2121
prediction, 2650, 4321
psychology, intelligence and, 4376
reliability, 1635
science, prediction, 4344
spelling, 4377
student attitude, 536, 4331
subjective factor, 2637
systems, 3751
(see also Scholarship)
Marriage, 1999, 2581, 3626
abstention, college woman, 2570
adjustment, 448, 2015, 2016
treatment, 2563
age, divorce and, 5464
family size and, 5991
offspring psychosis and, 2453
attitudes, 873, 2565
student, 5398
beauty, scholarship, woman, 4880
consanguineous, 1983
counselling, Europe, 4247
courtship mores, 2582
depression and, 2526
elopement, 2571
essays, 3628
mixed, 2519, 4498 essays, 3628 mixed, 2519, 6498 essays, 2628
mixed, 2519, 6498
neuroticiam and, 4845
primitive, 1585
rate, urban ecology, 5989
readings, 4868
second, interval, 4846
selection, age in, 3077
assortative, 1544
population size and, 4939
psychopathics, 301
sex adjustment, 3057
success, correlates, 6530
training, 5549
Marxism, psychoanalysis and, 3093, 6356
psychology and, bibliography, 3788
Mate, see Marriage
Maternal behavior, cortex and, rat, 1046
extra-hormonal, 3467
fish, 3475
hormone and, 1307 fish, 3475
hormone and, 1307
influence, adolescence, 5059
rejection, 1675
personality, child guidance and, 5326
recognition, chimpanase, infant, 4033
rejection, crime and, 4205
Mathematics ability, 2128, 4368
reasoning, acholarship, 2882
ability, school, 3176
statistics and, 517
test, 3710
disability, brain localisation, 3548
cases, 4791
language and, 2860
needs, teachers, 6646 needs, teachers, 6646 placement test, 946 teaching, 4340 review, 5550 value, 5556 Mase alternation, child, 3981 double, 3948, 6286 double, 3948, 6286 anticipatory reaction, 158 blinds, difficulty, 167 choice determinants, 1193 conditioning and, rat, 1265 delay effects, 182, 1262, 2863 habit, sensory control, 3942 habit, sensory control, 3942 human, 5636 learning, 734 brain and, 735, 6275 child, 5215 ideational, 1195 practice distribution, 5822 practice distribution, 88 motivation, rat, 6280 orientation, rat, 3949, 6285 reliability, 172 Meaning, 2703, 3820, 4470, 5112 perception and, 1123 theory, 29 operational, 591

physiological, 71
Titchener on, 2198
vague, 7
word counts, 411
work decrement and, 2927
Measurement, child, 573
reliability, 983
education, 1629
psychological, 23, 5648
spurious, 5646
Mechanical ability, 1612
correlates, 5025
test, 963, 2071, 4390
twins, 565
Medulla lesion effects, 300, 664
respiration and, 627, 5709
Memory, bird, 3426
cardiazol treatment and, 5919
change, 724, 1218
conditioning and, 3423, 4647
cortex and, 4520
datable, 3417
elaboration, negro, African, 422
executional, 174, 736 datable, 3417
elaboration, negro, African, 422
exceptional, 174, 736
factor analysis, 1194
feeling and, 720
review, 2333
hunger and, dog, 3429
learning and, 173
loss, 5812 loss, 5812
gas poisoning, 851
retrograde, 1467
traumatic, 1460
musical, test, 4906
organization, 199
psychosis and, 6415
span, effect in, 5807
review, 2327
time, animals, 1167
training, 192 training, 192 visual, lizard, 1155 (see also Forgetting, Learning, Recall, Recognition, Retention)
Menstruation cessation, hormone effects, 1325 cycle, age and, 2368 effects, 216, 5840 emotional, 2378 learning and, 179, 727 metabolism and, 788 metabolism and, 788
sensitivity in, 5862
suicide and, 4218
Mental hygiene, 261, 611, 870, 2464, 3003, 4108, 4795, 5918
California, 5036
character education vs., 3004
child, 272, 1707, 2668, 4147, 5954
institution, 3210
college, 1493, 2133, 4814, \$357, 6432, 6644 congress, 2430 congress, 2430
culture and, 4086
economy of, 6384
education and, 3171, 4167, 4375
England, 2433
family and, 4230
infant, 4422
mental work, 5566
nurses' textbook, 3019
old age, 1402, 1483
pregnancy, 4103 pregnancy, 4103 prisoner, 465 recreation and, 4406, 4744 Rumania, 6441, 6443 rural, 1928 rural, 1928
Russia, 3024
school, 935, 2143, 3749
sterilization and, 4797
survey, 530
wocational guidance, 2134
Metabolism, age and, man, 2912
calcium parathyroid and, 2926
chlorine, during work, 5869
cortex and, 663
exercise and, 1270
fatigue and, 4667
hypnosis and, 2379
invertebrate, 1287
menstruation and, 788
mental efficiency and, 2906 mental efficiency and, 2906 narcosis, 2387 nercous, 2387 nervous control, 1883 noise and, 2390 psychoanalysis and, 1364 rate, Spain, 3485 variability, 742

Mictu

Migra C d

Mimie in

Mind.

Mollu

n

81

Mome

Mong

Monk

Mone

Mort Moro Motiv

Milita

work and, 4730 attitude and, 741 Micturition, see Urine Migraine, fugue in, 279 personality, 5969 phenomena, 1935 Migration, child scholarship, 2130 Migration, child scholarship, 2130 crime and, 482 drive, bird, 2917 intelligence and, 874, 4245, 5435, 6006 turtle, sensory control, 2831 Military driving, personality and, 5528 psychology, 4319, 5509, 5975, 6024, 6038 bibliography, 4302 Germany, 2727 hypophrenia, 4309 panic, 6005 hypophrenia, 4309
panic, 6005
requirementa, 5498
volition, 923, 928
selection, 5393, 5507, 6583, 6590, 6591
Mimicry, emotion and, 1948
insect, 246
Mind, body and, 51, 1733, 3780, 3814, 4491,
5791, 6174 791, 6174
Descartes, 28
Holland philosophy, 3813, 5110, 6179
collective and objective, 2227
evolution, 5091
nationality and, 5412
soul and, 3291
theory, 2199 theory, 2199
substance, 45
Mollusk eye, nerve impulse, 643
learning, 4662
motor determinants, 3484
innervation, 1742
reaction time, 5878
respiration, 1287
tropisms, 4725
vision, 5167, 5780
Moment, chisquiere distribution vision, 5167, 5780
Moment, chi-square distribution, 2717
correction, 2733
formulae, 2714
J-curves, 2711, 2742
Mongolism, 819, 3560, 4168, 4179
determinants, 1382, 2968, 5336
heredity, 5957
Indian, 3012
jaw measurements, 4820 Indian, 3012
jaw measurements, 4829
maternal age, 4075
one twin, 296
Monkey, brain lesion and color vision, 5180
cerebellum lesion, 648, 1065
choice, 3938
color vision, 682, 1132
cord, anterior roots, 5690 cord. anterior roots, 5690
cortex, 677
localization, 633
motor lesion, 5129
sensory, 668, 3315
stimulation effect, 5149
touch control, 659
tracts, sensory, 4533
form perception, 2318
frontal lobe lesion, 649, 651, 1072, 1767, 3320 frontal 3320 3320 inhibition, bromine effect, 1303, 4616 insight, 159 labyrinth lesion, 622 learning, 135, 1853 nystagmus, galvanic, 2380 occipital lobe lesion, 1074, 1089 relational reaction, 702 effect contacts. 3022 size constancy, 3902 space relations, 3350 space relations, 3350
startle, 1276
success attitude, 1211
symbol behavior, 3933
temporal lobe lesion, 3321
vision, brightness and, 3377
conditioning, occipital lobes and, 5705
Monotony, see Boredom
Mood correlates, 2503
euphoric, narcotic, 1873
normal, 3601
psychosis, 5907
somatic effects, 1338
fluctuations, 4198
hysteria, 5378 Morality, see Ethics
Mortality, see Ethics
Mortality, see Death rate
Moron, see Hypophrenia
Motivation, ability, speed, 1255, 2347
child, 6685

chimpansee, infant, 226 conditioning, 2328 frustration and, 365, 802 industry, 3141, 3156, 5504 law, 6529 learning, 153 child, 984 child, 984
chimpanzee, 1197
rat, 5205, 6280
pottery, 807
practice and variability, 4620
leet and, 2339
atomach and, rat, 6350
student, vocation choice and, 548
wage, 3704
symbolic, chimpanzee, 149
theory, 3444
vocational, teacher, 2628
volition and, 776
(see also Drive) volition and, 776
(see also Drive)
Motor ability, child, race difference, 3099
young, 6134
intelligence, social facilitation, 3984
intercorrelations, 3457
perception, 2896
schizophrenia, 4182
vocational experience and, 4685
behavior, infant, 4401
light, sound, 1275
schizophrenia, 1442
social stimulation, 1504
rat, 1548
cortex, 5128 cortex, 5128 ablation, monkey, 5129 conditioning and, 4653 conditioning and, 4053 excitability, primate, 5147 disorder, 1380, 4005, 4104, 4125, 4126 brain lesion and, 3836 convulsion, child, 4402 correlates, 1306 speech and, 3086 treatment, 3585 treatment, 3585
functions, 2924
study, 4720
impulse, localization, 3823
learning, rest and, 2876
nerve supply, snail, 1742
variability, 3453
Movement, acceleration in, 5252
ameba, light and, 698
apparent, see Illusion, movement
arthropod, 6224
automatism, basis, 4761
captive mammals, 6321
contrast in, 6317 captive mammain, 6321 contrast in, 6317 control, fish, 4705 differentiated, 4015 experience, vectors and, 2276 expressive, intercorrelations, 5841 fish, 4690 nsh, 4690 fly larva, 769 Gestalt and, 3361 growth, amphibia, 4731 habitual, 4042 nabituat, 4042 illusion, 3386, 6260 perception, 248, 1111, 2835 cat, 111, 121 personality and, 3399 time interval and, 692 physiology, 5837 plant, 5237 playful, idiot, 3531 rate, individual, 2904 relative, sensations, 1162 stimulus, and avoidance, chimpanzee, 5243 stimulus, and avoidance, chir structure, 1315 time and, 708 tempo, affective value, 2546 Moving picture, see Cinema Murder, 2594 background, 473 child, 467, 1593, 3683 paranoid, 466, 471 records, 5491 schizophrenic, 2591, 6447 suicide and, 487 Muscle vs. brain potentials, 5131 suicide and, 487
Muscle vs. brain potentials, 5131
chemistry, 1305
chronaxy, autonomic and, 2393
contraction, delayed, 791
determinants, mollusk, 3484
drug effects, 4135, 6302
electrolytes and, 1867
emotion and, 5833

erve stimulation and, 785

supply and, 1278 temperature effects, 4677 tetanus and, 758 efficiency, food and, 760 oxygen and, 2360 elasticity, 5879 excitation, 3447 bird, 6197 capacity, 4016, 5233 inhibition, 6335 recovery, 5894 hollow, tonus, 5860 inhibition, crustacean, 4712 mind and, 6315 ninid and, 0315
nerve, drug effects, 6198
facilitation, crustacea, 4025
junction, 766, 1073, 1753, 1755, 1882
fetus, 1061
inhibition, 1754
supply, 1078 inhibition, 1754 supply, 1078 polarization, autonomic and, 3304 potassium loss, 750, 2365 potentials, 1316, 2382, 5227, 5838 bilateral, 1335 conditioning and, rat, 1216 difficulty and, 6308 face, 1321 frog, 778, 2376 imagery, 5885 labyrinth and, 2352 propagation, 4722 propagation, 4722 reflex, 1317 work, 244 properties, 3997 properties, 3997
reinforcement, 5872
rhythm, vitamin and, 6345
rigidity, decerebrate, 5139
section, locomotion and, rabbit, 2930
shortening, tension and, 6325
smooth, adaptation, 5192
sphincter, innervation, 1890
stimulation, electric, 6309, 6329
frequency, crustacean, 6354
tension, 6326
adjustment and, child, 1701 requency, crustacean, 0334
tension, 6326
adjustment and, child, 1701
deaf mute, 1304
latent time and, 797
length and, 740
optimal, 2367
reflex and, 786
skin resistance and, 4688
tetanus, after-effects, 758, 5839
tongue, strength, 6001
tonus, 5860, 6334
bulbocapnine effect, 774
illumination and, 1819
registration, 1290
skin and, frog, 1311
striate, 6334
tremor, brain potential and, 1093
posture contraction and, 1327 posture contraction and, 1327 Music ability, astrology and, 5089 correlates, 5025 disturbance, 1961, 6442 intelligence and, 3648 tests, 2531 training effect, 3242 aptitude test, 409 aptitude test, 409
Japanese, 900
distraction, reading and, 1997
education, 502, 1571, 5540
bibliography, 502
research, 4348
review, 501, 5404, 5565
emotion and, 876, 1566
determinants, 2546
respiration and, 1878
epilepsy and, 3523
expression, 896
flute playing, 6537
folk, study, 6011
form in, 4257
Germany, 5982 Germany, 5982 hearing in, 6033 theory, 4541 eart activity, galvanic reflex, 5262 heart activity, galvanic reflex, sindustry, 929 intelligence, 3664 intervals, 4847 Japanese, 4927, 6509 learning, 4915 melody, theory, 907 memory test, 4906 nationality identification, 1574 personality in, 877

SUBJECT INDEX

posture and, 3636 preference, child, 4438 proportion and, 5754 proportion and, 5754 psychology of, 426, 529, 532, 1588, 4238, 5471, 5472 Germany, 454 reading span, 3656 research, 401, 427 research, 401, 427 subjective vs. objective, 5450 review, 439, 1559 rhythm, 6520 tests, 2029, 2035, 3622, 3647, 4254, 4889 race differences, 3625 Seashore, 3630 therapy, 4152 therapy, 4152
time reversal, 1136
tone control, piano, 425
vibrato, 419, 3670, 5804
pitch, 5804
violin performance, 2035
vocal, 3641, 3663
Musism, see Speech loss
Myopia, 5791, 6242
axial, 134
determinante, 2842, 2845 axial, 134 determinants, 2842, 2843 health and, child, 2307 heredity, 3892 treatment, 2796 review, 6246 vitamin D and, 5178 Mysticism, 893, 3108, 6521 case, 5397 case, 5397 group, 5943 hallucination, 6000 Oriental, 1350 photic phenomena, 4023 Myth, see Folklore Name customs, primitive, 4937 affective value, 905 use, child, 570 use, child, 570
Narcosis, electric, frog., 6295
excitability and, 2259
metabolism and, 2387
treatment, 4780, 5496
Nationality, see Race
Nausea, child, personality and, 4405
Need, attitudes, 5432 Need, attitudes, 5432 child, 4697 pleasure, 4019 satiation, child, inferior, 3225 Negro adjustment, 2008 college, psychology in, 3775 culture, Haiti, 400 crime, 4946 culture, Haiti, 400
crime, 4946
dissertations on, 4246
ecology, 1542
education, bibliography, 6607
eidetic imagery, child, 728, 730
family, urban, 2538
memory elaboration, 422
personality, 6499
psychosis incidence, 6417
race consciousness, 3062
religion, 4834, 5407
society, Dahomey, 6504
student, interest, 3175
suicide, 6031
transient, education, 951
Nerve cell bodies, synapse transmission, 6225
nuclei, variability, 6209
Purkinje, 6193
secretory, 3330
center, drug effects, 6218
vasomotor, 1744, 1745, 1746, 1747,
1748, 1892
chain, internuncial, 5135 vasonotor, 1749, 1749, 1749, 1747, 1748, 1892
chain, internuncial, 5135
cochlear, ending, 3828
conduction, 628, 634, 665, 669, 670, 1087, 3833, 5708, 6204, 6206
acetylcholine in, 2783, 3824, 3845
antagonism in, 1770
antidromic, 1769
audition, 2824
autonomic, 3302, 3303
behavior and, 5724
blood and, 2239
delayed, 642
direction, 1766 direction, 1766 disturbance, 6226 drug effect, 2247 ganglion, 630, 6211 oxygen lack and, 5830 psychology and, 1739

rate, 1049 refractory period, 2252, 2266, 5123 resistance, 5053 spinal, discovery, 1084 subthreshold, 2258 theory, 5140 time relations, 637, 661 types, 4521 uterus, 666 control, liver function, 2269 Turbellaria, 656 degeneration, 3333 degeneration, 3333 peripheral, 675 turtle, 5714 vitamin lack, 6214 disorder, 2957 child, 1403 disorder, 2957
child, 1403
extrapyramidal, 3527
review, 4072
pain in, 1907
Rorschach in, 357, 3042
scherois, fatigue in, 1945
multiple, 1936
excitation, 3312, 5718, 5720
autonomic, 1764
brain potentials and, 2240
calcium and, 672, 1056
carbon dioxide and, 644
electric, effects, 5692
eye, mollusk, 643
fatigue and, 2384
mechanical, 5716
number vs. frequency, 3308
peripheral, 1095, 1100
potassium and, 3316, 3338
repetitive, 1088, 2774
muscle effects, 785
secretion and, 1864, 6322
spread, 1094
summation, 2251, 5723
squid, 6216
facial, section, 1276
heat, epilepsy, 4749
impedance, 6199
injury, 4809
modifications, 3855
pain in, 2272 modifications, 3855
pain in, 2272
mediation, chemical, 630, 787, 4678
theory, 634
mineral content, 5676
motor, anastomoses, 3823
-muscle block, catelectrotonus and, 3837
condition, bird, 3826, 6197
curare effects, 3825
drug effects, 1736, 6198
facilitation, crustacea, 4025
relation, 766, 1073, 1753, 1755, 1882
inhibition, 1754
fetus, 1061
system, 4534
transmission, facilitation, inhibition modifications, 3855 transmission, facilitation, inhibition, 5702 optic, atrophy, 3840 chiasma, in one-eyed subject, 6217 lesion, 2849 lesion, 2849
vegetative function, 4589
periodicity, 5685
potentials, apparatus, 2218
auditory, 673
deafness, 781
reptiles, auditory, 3857
cold, heat, pain, 6227
crustacean, 6196
human, 2248
perthauers and 6195 crustacean, 6196
human, 2248
pathways and, 6195
spinal accessory, 3831
spread, 5132
pyramidal, lesions, 4161
reflex discharge, 5721
refractory period, 57, 2266
respiration, 671
spinal, diameter, 1740
staining, 6200
structure, cord, 4507
learning and, fish, 1861
supply, hypophysis, 1749
muscle, 1078
reflex, 641
pupil, 6213
snail movements, 1742
sphincter, 1890
system, 1773, 2261, 6311
arthropod, 2270
bird, 1059
central, conduction rate, central, conduction rate, 1049

facilitation, extinction, 660 facilitation, extinction, 66
speech disorder and, 2052
consciousness and, 5275
film, 2242
film, 1058
genesis, 1064, 6207
insect, 5688
oxygen lack and, 5119 relationships, 5693 reptiles, 1060 review, 3574, 3843 review, 3574, 3843
skin, 64
study, 2778, 3834
history, 2223
journal, 5669
textbook, 1070, 5124
time error and, 2301
trophic influence, 4518
trigeminal, pain and, 6219
(see also Autonomic, Chronaxy, Cord.
Excitation, Ganglion, Inhibition, Vagus)
Neurology, see Nerve system
Neurosis, 287, 2440, 2451
advantage, 3559
attention disturbance and, 4751
aviation and, 2974, 4822
benzedrine effects, 5366
child, 268
concept, 1353, 5352, 5369, 5964
depersonalization, 4559
delusion and, 814
determinants, 5911
disfigurement, 4763
disorganization, 291, 4136 disorganization, 291, 4136 dream and, 1365 experimental, 838, 1238 experimental, 838, 1238
cat, 5335
dog, 3431, 3569, 3570
inhibitory, 3434
pig, 1391
sheep, 5350
treatment, 3567, 3568, 3571, 3572
family, 2424
galvanic reflex in, 4173
heart, 6410 demotion, 5068 heart, 6410
rate and emotion, 5968
heredity and, 842
histories, 4802
hypochondria, epilepsy and, 4107
incidence, Scotland, 5327
introversion and, 344
irritability, 1922
love need in, 288
mechanisms, 6437
neurasthenia, 5912
review, 848 review, 848 organ, 3025, 5939 physiology of, 1379, 2993 prophylaxis, 5351 physiology of, 1379, 2993
prophylaris, 5351
psychasthenia, 6421
puerperal, 853
social, 2478
sublimation in, 2964
susceptibility, 1954
child art and, 584
institutional, 856
correlates, 4845
factor analysis, 2507
school progress and, 4832
thorax symptoms, 1468
traumatic, 4156
child, 1430
treatment, 3526, 5358
psychoanalysis, 2405
Sweden, 1901
(see also Hysteria, Migraine, Obsession, Phobia)
Night-bhindness, see Adaptation, dark
Norm, biological, 4498
Number discrimination, dog, 1188, 1190
rat, 725
value, 1101
Nystagmus, 221
cerebellum and, pigeon, 1071
cortical control, 59
galvanic, monkey, 2380
heredity, 6273 cortical control, 59
galvanic, monkey, 2380
heredity, 6273
miners', 2953, 3266
postrotatory, 229, 1268, 6338
decerebrate guinea pig, 2890
training effect, 3454
voluntary, 3874
(see also Equilibrium, Labyrinth) Obedience, child, 3044

Obesity
Observa
Obsession
lau
pro
psy
Ro
Occulti
Occupa
Occupa

Odor so

Olfactic aps cor dia dis dis dru foo infri infi ins

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An
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Fr

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bio bli ch co de

Obesity, psychological factors, 6412
Observation techniques, 3799
Obsession, experience in, 6405
laughing, 6438
process, 2951, 4820
psychoanalysis, 3493
Rorschach in, 4208
Occultism, see Parapsychology
Occupation, see Vocation
Occupational therapy, see Work therapy
Odor sources, bodily, 3911
Old age, attitudes, 1489, 1503
conditioning in, 4702
dog, 4648
creativity in, 4645
crime in, 3121, 3127
family relations, 1528
hearing in, 1824, 5158
journal, 5623
mania in, 1431 journal, 5623
mania in, 1431
mental hygiene, 1402, 1483
psychosis in, 1383
shrinkage in, 2911
study, 6330
Olfaction, amphibia, 3401
apparatus, 3288, 6175
apparatus, 3288, 6175 apparatus, 3288, 6175
conditioning, brain control, 5677
diagnosis and, 3890
discrimination, brain and, 6276
disturbance, head trauma, 6453
drug effects, rabbit, 1801
food and, rabbit, 1802
inflammation and, rabbit, 1803
insect, 1143
respiration and rabbit, 3374 insect, 1143
respiration and, rabbit, 1803
insect, 1143
respiration and, rabbit, 3374
sex and, guinea pig, 1314
snake, 4611
threshold and imagery, 5744
vision vs. adaptation, 5748
Oligophrenia, see Hypophrenia
Operationalism, 591, 3268, 4451, 4456
physics, 38
Opinion, child, 1694
city merits, 3113
crime and, 6575
determinants, 3083, 3092
future events, 3055
measurement, 405, 2540, 3063, 5453, 5986
political, 5426
age, income, 395 age, income, 395 primitive, 3087 public, 2524 rural, 3104 rural, 3104
shift measurement, 2025
similarity, friends, 1588
stereotype and, 3089
(see also Attitude)
Organizations, Amer. Asso. Appl. Psychol., 2207
constitution, 6144
Amer. Psychol. Asso., proceedings, 1029,
2234
Clinical Section (466) 2234 Clinical Section, 6184 child psychiatry congress, 3026, 3265, 4447, 5625, 5653, 6435 Bastern Psychol. Asso., proceedings, 46, 5659
educational measurements congress, 1643
esthetics congress, 2762
Experimental Psychologists, 3774, 5638
French psychoanalysts, congress, 2424
international congress, 2232, 3810, 4446,
5099 5659 mental hygiene congress, 2430, 2472 Midwestern Psychol. Asso., proceedings, 6, 5644 Psychological Corporation, attitudes, 3623 history, 3685 history, 3685
psychotherapy congress, 3533
Denmark, 1903
radio in education, congress, 5003
recreation congress, 5023
Rocky Mountain Branch, A.P.A., proceedings, 20
Southern Soc., proceedings, 22
Western Asso., proceedings, 15
Orientals, crime, 4945
Orientals, crime, 4945
Orientalton, 3379, 3391
arthropod, 1173, 1874, 2336, 4542, 4594
aviator, 925
biological significance, 6301 biological significance, 6301 blind, 4569 child, 743

cortex and, rat, 3881 deaf mutes, 1304

determinants, 2818 disturbance, 3436 insect, 6316 letters, child, 3762 loss, to persons, 2477 maze learning and, rat, 6285 schizophrenia, 4111 mare rearming and, rat, 0.285
schizophrenia, 4111
sense vs. sex organs, 5253
touch, 699
vertical, 5758
head inclination and, 3872
Oscillation effects, 5239
Ovulation, hypophysis and, rabbit, 2246
Oxygen, dark adaptation and, 5739
excess, effects, 1274, 1312
work and, 5254
fatigue recovery and, 1279
lack, blood pressure and, 4703
sugar and, 5849
carbon dioxide and, 756
collapse, 4701 collapse, 4701 dog, 2893 effects, 3459 nerve function and, 5119, 5830 pathogenic significance, 6304 pathogenic significance, 6304 pupil reflex and, 4729 vagus relations in, 6337 vision discrimination and, 680 word association and, 5811 muscle efficiency and, 2360 Pain, autonomic in, 5790 blood pressure and, 3904, 3916 paresis, 3563 volume and, 2305 central, 2838, 5189 chronary, 3326, 6203 classification, 2844 cortex and, 3335 esophagus, 1841 eye, 3385 function, 1793 heart rate and, schizophrenia, 1390 heat, cornea, 1821 heart rate and, achizophrenia, 1390 heat, cornea, 1821 insensitiveness to, 5757 ischemic work, 4576 loss, hysterical, 2274 simulated, 1921 nerve lesion and, 2272 pathways, 2238 potentials, 6227 trigeminal, 6219 paresis, 4142 physiology, 1777, 4584 pressure and, 6230 psychiatric aspects, 1907, 1947, 3866 referred, 2816, 3311, 3354 sense, 100, 1164, 1839, 4558, 4592 apparatus, 6177 simulation, 2279 somatic, 2788, 2822 theory, 1794 review, 6229 tissue origin, 259 somatic, 2788, 2622
theory, 1794
review, 6229
tissue origin, 259
treatment, 2304, 3870, 6429
visceral, 1820, 2785, 3349
disease and, 4547
Paralysis, cerebral, treatment, 1905
oculomotor, effects, 1108
seizure, 2980
spastic, frontal lobe and, 1757
Paranoia, loneliness and, 6434
personality, 6379
forensic judgment, 4189
psychotherapy, 295
social component, 2972
Parapsychology, 256, 1896, 2408, 2419, 2940, 3503, 4059, 5904, 6367, 6368, 6369
apparatus, 5113
astrology, esthetics and, 5089
vocational prediction, 1611
clairvoyance, 3501, 4054, 4056
critique, 3495, 3509, 3520
deception in, 4049, 5288
defense, 4742
distance effects, 3510
eidetic imagery and, 810
error sources, 5276
fire walk, 2397, 2420
experimenter-subject relationship, 5287
materials, 1370
mediumship, personality and, 6371
methods, success and, 3492
miscellaneous, 5293
precognition, 4060, 5289

psychosis and, 5292 psychosis and, \$292 radiation, mental, 806 sensory cues, 3511 spiritualism, 1366 statistics, \$56, 1019, 1039, 2937, 3494, 3496, 3498, 3499, 3518, 4051, 4052, 4734, 4736, 4741, 5090 telepathy, 3508, 3512, 3519, 4046, 6374 test, 3516 telepathy, 3508, 3512, 3519, 4046, 6374
test, 3516
trance personality, evaluation, 2946
twins, 3500
volition and, 3506
Parasite, host effect, 4613
selection, 4577, 4599
Parent age, child defect and, 5339
alcoholism, child intelligence and, 5007
crime and, 4293
attitude, child, 4441
behavior, 2159
high school, 510
personality effect, 3246, 5063
education, 3187, 5035, 5620
psychcanalysis and, 2400
review, 4089
Russia, 3170
loss, correlates, 6691
crime and, 5483
eminence and, 6540
relation, child adjustment and, 3200
Paresis, blood pressure and pain, 3563 relation, child adjustment and, 326
Paresis, blood pressure and pain, 3563
deterioration, 2466
heredity, 3017
hysterical symptoms, 2486
pain sensitivity, 4142
personality, 4137
remission syndrome, 2467
Rorschach in, 1946
treatment hallucinations in, 6411
delusions in, 4158
Parkinsonism, association tests, 262 Parkinsonism, association tests, 262 galvanic reflex in, 303 startle in, 2948
Part vs. whole, see Practice distribution
Pattern discrimination, bird, 4546 rat, 2821 span and, 2325 temporal, modality and discrimination, 2803 Penmanship, see Handwriting Perception, 2829 central integration, 1778 child, Chinese, 1692 curve, 713 depth, 127, 1172 rat, 707 determinants, 5181 direction, 2818, 3379, 5758 distance and, rat, 5175 emotion and, 768 emotion and, 768 environment and, 2784 factor, 6181 first visual, rat, 1135 form, monkey, 2318 size and, 1843 thermal, 1168 thermal, 1168 immediate past in, 2216 intelligence and, 5775 learning and, 3952 meaning and, 1123 motor ability vs., 2896 movement, 1111, 2835 time interval and, 692 time interval and, 692 number, value and, 1101 personality and, 857 point configurations, 6189 projection of, 3388 successive, 703 thought and, 3772 (see also Illusion)
Performance failure, 5855 race and, 5998 time estimation, 5742 race and, 5998
time estimation, 5742
Perseveration, brain potentials and, 71
flicker threshold and, 5731
motor, personality and, 3606
variation, 1967
race difference, 4918
reminiscence, recall, 5213
stutterers, 188 reminiscence, recall, 5213 atutterers, 388 Persistence, 6478 adolescent, 863 marks and, 2121 rat, 1254 Personality, 1964, 2500, 5975

adjustment, 3416
alcoholic, 1959
woman, 2958
allergy and, 5980
analysis, 2502
Apponyi, A., 3603
attention and, 3608
aviation, 2089, 3688
birth order and, 1477
Brahms, J., 1539
change, child growth, 6674
Rorschach, 1492
traumatic, 3010
character and, 5388
child, 530, 566, 997, 6135
classroom, 6139
picture andlysis and, 5612
Coleridge, S. T., 5966
college woman, 1493
conflict and, 4842
constitution and, 858
adolescent boy, 3592
student, 3035
country community, 5457
culture and, 393, 861, 868, 886, 1501, 2040,
4890, 4193, 6366
deafness and, 112, 3859, 4207, 5786 adjustment, 3416 4890, 4193, 6366 deafness and, 112, 3859, 4207, 5786 delinquent, 461, 3123, 3598, 3678, 3684, 4205, 6080 Institutionalized, 6561 disease and, 336, 337, 831, 859, 865, 869, 1414 1414
disorder, 2509
college, 1647
handwriting and, 3049
Dostoevski, F. M., 849, 4045
drug effects, 3595
Dunbar, P. L., 2396
essays, 6444 estimation, 356 1494, 1968, 1971, 2511, 3602 behavior, 4835 behavior, 4835 bibliography, 1487 child, 967, 1495 reliability, 348, 350 usefulnesa, 867 validity, 1496, 1975 factor analysis, 4195 family and, 1500, 2496 family and, 1500, 2496 frustration and, 365 gifted adolescent, 1482 group dominance and, 6508 growth, 2499, 5040 hair color and, 352 handwriting and, 4837, 6037 high school and, 6608 history and, 866 hypothalamus and, 5905, 6332 identification, appagent, 6360 hypothalamus and, 5905, 6332 identification, apparent, 6360 industry, 3154, 3155 infant feeding and, 1689 infantilism, 3562 insecurity, nursery school and, 6118 interest and, 5393 introjection, 2404 laterality and, 5871 leader, revolution and, 3085 Leopardi, G., 4861 levela, 358 Leopardi, G., 4861 levela, 358 life-style, 2501 Luther, M., 2032 maternal, child guidance and, 5326 mediumship and, 6371 migraine, 5969 music, 877 parcipistic, 2416 music, 877
narcissistic, 2416
negativism, experimental, 1446
negro, 6499
Janet, McDougall, 4112
paranola, 6379
parent attitude and, 3246, 5063
paretic, 4137
perception and, 857, 3399
representation and 3606 perception and, 85/6, 3506 philosophy and, 1486 physician, 1605 play and, 1476 polarity in, 1727 politics and, 3645 prisoner, 5488 prisoner, 5488 psychosis and, 5369 psychotherapy and, 835, 5385 race and, 4225 rating, child, 6475

rejection mechanism, 1348 religion and, 6481 restitution effect, 351 sales ability and, 6579 school adjustment and, 5981 shyness, schizophrenia and, 5377 social aspects, 345, 1490 social aspects, 343, 1490 disturbance, 2455 life and, 2584, 5403 speech and, 3653 study, 2497, 2665, 3036 trends, 2505 sublimation, 6358 percessis, 2964 sublimation, 6358 neurosis, 2964 suicide and, 5970 tattooing and, 1475 teacher, 4378 test, 2498, 2506, 4396, 5382, 5391 adolescence, 3043 behavior problem and, high school, 5009 child, 4838 correlates, 5972 frankness, 4214 correlates, 5972
frankness, 4214
pictures and, 2666
prediction, 5971
problem behavior and, 2692
repeated, 4839
review, 6482
Rorschach, 5978
Rumania, 4812
validity, 3037, 5974, 6603
theory, 2702, 3593, 5390, 6469
thought, volition, 805
training, 1980, 2508, 3712, 4215
trait, measurement, 5977
oscillation, 6116
Weber, C. M. v., 3609
types, 3029
visceral aspect, 864
voluntary, 364
(see also Character, Introversion, Rorschach)
Personnel, bibliography, 6658
college, 953, 1637, 4987, 6102
government, 2610
industrial, 5902, 5534
practice, 2009
Rumania, 4969
rating plans, 6078
record, 5584
validity, 6578
training, 931, 3152, 3153
Phi phenomenon, see Illusion, movement
Philosophy, anthropology, 3257
Descartes, 10
dialectics, science and, bibliography, 3787 Descartes, 10 dialectics, science and, bibliography, 3787 dualism, 2750 dualism, 2750
finality, 4457
Gestalt and, 3792
idealism, Gentile, G., 1017
Jung, C. G., 257
parallelism, refutation, 1733
personal, 3279
personality and, 1486
pragmatism, 2739
psychology and, 1, 3783, 3793
task, 4454
totality theory, 1014 task, 4454
totality theory, 1014
transcendentalism, 590
truth, definitions, 3654, 5108
Phobia, agoraphobia, 1356, 1360
child, hypnotic cure, 326
light, 5779
number, 2427
Pressey test in, 5962
situational, 4077
Phoria, see Eye muscle
Physiognomy, 1480, 1488, 3596
philosophers, 341
schizophrenia, 4090
Physiology textbook, high school. schizophrenia, 4090
Physiology textbook, high school, 3263
trend, 5093
Pitch, see Hearing
Pituitary, see Hypophysis
Plant, excitation, 1096, 5193, 5890
movement, 5237
rhythm, diurnal, 5244
trop.ism, 2823, 2934, 3352, 4550, 4583, 4601,
5741, 5767
hereditary absence, 6251 5741, 5767 hereditary absence, 6251 Play, child, 1732, 2193, 5604, 6141 study and, 5596 constructiveness, 6117 diagnostic value, 1690

education and, 574 education and, 574
game, origin, 4256
groups in soc al work, 4429
interests, child, 4427
material, 1677, 3221, 3766
mental hygiere and, 4406
personality and, 1476
psychotherapy, 2406, 2426, 3497, 5062,
5075, 5613, 6122, 6680, 6681
significance, child, 3209
Pleasure, galvanic reflex and, 2385
judgmental theory, 234
need, 4019 need, 4019 recall and, 2350, 4617, 4654 Poison, see Intoxication Politics, attitudes, 1538, 4878, 4910 attitudes and election, 5461 objectives, 1537 personality in, 3645 psychiatry and, 4123 student, 3066 Population density, reproduction and, 1551 Population density, reproduction and insects, 880 quality, 428 international relations and, 5983 size, mate selection and, 4939 trends, Scotland, 1520 Posture steadiness, fatigue and, 6344 basic, determinants, 5848 brain control, lizard, 657 center of gravity, 762 contraction, tremor and, 1327 infant, assistance and, 5595 contraction, tremor and, 1327 infant, assistance and, 5595 music and, 3636 reflexes, 2905, 4918, 4026, 5139 control, 4525 sleep, child, 5038 urinary inhibition and, 5847 Practice, bimanual, 2897 distribution, 151, 1200, 1233, 1263, 2876, 4622, 4644 forcetting and, 152 distribution, 151, 1200, 1233, 1263, 2876, 4662, 4644
forgetting and, 152
maze learning, 5822
presentation speed and, 6284
problem solving, 2330
reminiscence and, 170, 3418
study, 523, 6632
factor loadings and, 4666
variability and, 4658, 5828
motivation, 4629
vocational skill and, 2617
Prediction, personality inventory, 5971
scholarship, 538, 1663, 2113, 2137, 2624, 4321, 6645
college, 4991, 6106, 6109, 6600
science, 4344
social events, 3055, 4900, 5993
weighting in, 608
Pregnancy attitude, 4197
false, 1381
interruption, psychosis and, 5297 interruption, psychosis and, 5297 mental hygiene, 4103 night blindness, 4567 psychosis, 5297 sensation, 84 cold, 74 Pressure apparatus, 6177 color vision and, 3920, 3921, 6266 Pressure apparatus, 6177
color vision and, 3920, 3921, 6266
effects, 1889
pain and, 6230
receptors, carotid, 1805
stimulation, fetus, 1281
summation, 5729
vibration and, 686
Prestige measurement, 1550
suggestion, 253
susceptibility, 4895
Primate cortex, 3853
discrimination and parietal lobe, 6264
food preference, 4670
frontal lobe, chimpansee vs. man, 6220
thalamus, 6223
brain, fissures, 1750
cortex ablation, 5146
excitability, 5147
labyrinth ablation, 2894
learning, review, 1860
(see also Chimpansee, Monkey)
Primitive attitude toward whites, 4:3
birth beliefs, 3613
character, 1898
formation, 2018
culture, 6042 formation, 2018 culture, 6042 integration, 385

dead dissection dissec

Problem

Profession Propaga ana bible effe propub rad schelles

Proprior altifree jud loca three wei

Psychis chi

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personality and, 393 death attitudes, 4887 dissociation, 1953 dream, 399, 397, 455 homosexuality, 2533 hysteria, 1963 initiation rites, 5452 injury to, 6052 kinship behavior, 884 injury to, 6052 kinship behavior, 884 magic, 453 marriage, 1585 mentality, 3079, 3620 name customs, 4937 opinion, 3087 psychosis, 5936 psychosis, 5936 psychotherapy, 3617, 5411 relig'on, 434, 1527, 1587, 6028, 6523 society, negro, 6504 suicide, 4935 thought forms, 6500 suicide, 4935
thought forms, 6500
woman, 4936
(see also Anthropology)
Prison leadership, 4941
mental hygiene, 465
psychosis, 1439
social work, 2037
troatment, 4953
Prisoner, cierk test, 4278
co-operation, 1598
intelligence, 469, 4275, 6571
letters, 3675
personality, 5488
prognosis, 485
Probability distributions, 1006
parapsychology and, 4741
partial conclusions, 2709
theory, 14, 52, 1729, 2200, 3298, 3797,
4455, 5675
Problem solving, 726 theory, 14, 52, 1729, 2200, 3298
4455, 5675
Problem solving, 726
brain and, 1075
rat, 65, 3957
cat, 1208
generalization, 5813
human, 1247
practice distribution, 2330
rat, 180, 1227, 3956
teaching, 1858
teaching, 1858
teaching, 1858
teaching, 1858
teaching, 1858
teaching, 1858
teaching, 1859
teaching, 1859
teaching, 1859
teaching, 1869
professional orientation, see Vocation
Propaganda, accident prevention, 3150
analysis, 875, 4249
bibliography, 3107
effects, 2524, 4919
political, 4877
prophylaxis, 3639
public relations, 2069
radio, 4858
school, effect duration, 5572
slogans, 3106
war, 3053
Proprioception, 1138, 1809, 1839, 2300
altitude and, 5768 war, 3053 Proprioception, 1138, 1809, 1839, 2300 altitude and, 5768 frequency in, 691 judgment, 98 judgment, 98 localization, 103 threshold, 5771 age differences, 4544 measurement, 5770 weight lifting, 3370 Protosoa, food habita, 4671, 5247 light, motion and, 598 light, motion and, 698
sensitivity, 1837
mechanical stimulation, 5792
sex reaction types, 4010, 4011
tropisms, 4575
Psychiatry, anthropology and, 4262
child, 2436, 2969, 3006, 3241, 4110, 5067,
5950, 6449
conditioning and, 3937
congress, 3026, 3243, 4447, 5625, 5653,
6435
history of 1680 6435
hlstory of, 1680
medicine and, 5941
principles, 3757
concepts, 1941, 2450, 2966
conditioning in, 1461
England, 2971
cssays, 6457
history of, 817, 850, 4076
interview, 1449
law and, 4755, 5489, 6451, 6551
Germany, 3088
medicine and, 4092
military, 1418, 1923, 3698
nations, 408

nursing, 2954, 2994, 2996 outline, 1411 patient in, 3558 politics and, 4123 politics and, 4123 psychology and, 6454 rehabilitation and, 3575 review, 320, 3574 Scandinavia, 2454 school, 6436 scope, 4181 sex crime and, 4954
social relationshipe, 1415
statistics in, 2976
status, 1942, 1958, 4771
textbook, 1441, 2476, 5330
nurses, 1951
traveler, 2949
trends, 2999, 5658
unwilling patient, 1388
vitamins in, 3021
Psychic research, see Parapsychology
Psychoanalysis, 254, 2942, 4063, 5286
anthropology and, 6355
artist, 1342
asthma, 3490
benzedrine and, 2423
brain disease and, 5325 sex crime and, 4954 stma, 3-92 benzedrine and, 2423 brain disease and, 5325 child, 2406, 2426, 2935, 3497, 3507, 3771, 4050, 5613 choice of analyst, 6373 compulsion, 3493 conditioning and, 1362 critique, 255, 5283, 5295, 6357 dermatitis, 5269 education and, 3502 essays, 258, 1897, 4740, 5277, 5280, 5902 evolution and, 252 French, congress, 2424 group, 2401 hypnosis and, 4062 hypoglycemia and, 2402 infancy experiences, 1373 infancy experiences, 1373 instinct transformation, 3521 institute, report, 4043
interpretation in, 2403
interpretation in, 2403
interpretation in, 2403
ilterature and, 1372, 2415, 2422, 3668
logic of, 2425
Marxism and, 3093, 6356
metabolism and, 1364
neurosis, 2405
objectives, 3514
objectivity in, 2407, 4053
parent education and, 2400
personality types and, 5385
philosophy, 5898
pocetry, 4739
prostitution, 1345
psychosis types and, 5301 poetry, 4739
prostitution, 1345
psychosis types and, 5301
regulation, 2943
religion and, 370, 809
resistance, 808, 5272
results, 1355
schizophrenia, 4183, 5337, 6461
social work and, 2559
structuralism and, 4058
success factors, 2413
technique, 5282, 5901
end criteria, 1354
interpretation in, 2403
theory, 1367, 2417, 2421, 6370
(see also Dream, Unconscious)
Psychologist, interests, 4464
as university president, 595
Psychology, abnormal, status, 5944
system, 3541
aims, 599, 1721, 6170
animal vs. human, 3253
applied, 3300, 4465, 4476
Germany, 3148
history of, 3281
bibliography, 3259
biology and, 11, 4489, 5084
clinical, training, 2615, 4098
course, 6095
elementary, transfer, 1626
marks, intelligence and, 4376 course, 6095
elementary, transfer, 1626
marks, intelligence and, 4376
negro college, 3775
student wishes for, 6661
workbook, 619, 3809
criminology and, 4960
definition, 48, 2230, 4502, 6173
department, Calcutta, 3903
educational, 6613
review, 5541
esways, 39, 1015, 2202

existential, 3785 experimental, 1008, 4480 pathology and, 5361 textbook, 6188 textbook, 6188 workbook, 2213, 5101 experiments, 4459, 6183 faculty, defense, 4467 Germany, 603, 2726, 2728, 6161, 6187, Germany, 603, 2726, 2728, 616 6586 bibliography, 1724, 1737 high school, 956 history of, 41, 1009, 2759, 5106 Al-Farabi, 1042 Cambridge, 2699 China, 2758 Descartes, Brentano and, 32 consciousness, 21 Husserl and, 4 mind vs. body, 28 philosophy, 10 mind vs. body, 28
philosophy, 10
Hobbes, T., 4487
India, 2698
Janet, P., doctrine, 1367
Malebranche, 5662
Mead, G. H., 1996
Monakow, C. v., 1367
Proclus Diadochus, 6158
Sechenov, I. M., 1004
sensation, 2836
Stumpf, C., 3272
Titchener, E. B., 2700
Wundt, W., 5118
hormic, 5642
vs. Indian, 1027
Hungary, 1036 Ws. Indian, 1924 Hungary, 1036 industrial, 2086 Russia, 2537 training, 5537 training, 5507 Russia, 5537
training, 5505
institution vs. laboratory, 1419
law and, 3096
Marxism and, bibliography, 3788
medicine and, 4133
methods, 3782, 5082
neurological, 1739, 4529
personalistic, 2235
philosophy and, 1, 1709, 3783, 3793
physiology and, 2201, 3460
psychiatry and, 6454
relationships, 6155
review, 1937, 3784
scholastic, 1028, 1725
social, 2527, 3051
status, 3, 2754, 3273, 3796, 3816
Germany, 2725
structural, psychoanalysis and, 4058
systematic, 2755, 3786
teacher training, 2092, 3733, 6630
test, 6635
textbook, 618, 1038, 3260, 326., 3283, 4453,
4499, 5115, 5116, 5664, 5672, 6168
Germany, 6156
nurses, 5626
theory, 597, 2209, 5630
topics, 2197
training, 529
interneship, 5109
treatise, 4504, 5645
trend, 2208, 6154
values, 4500
Psychoneurosis, see Neurosis
Psychophysics, attitude scale, 130
judgment consistency, 2288
methods, scale construction, 1035
review, 3394
Psychosis, adrenaliu in, 4824
alcoholic, 5364 touch, 1839
Psychosis, adrenalin in, 4824
alcoholic, 5364
treatment, 5362
amaurotic idiocy, 6407
association motor technique, 3011
attitude, Jew, 1982
autobiography, 290
autonomic in, 1407
bensedrine effect, 801
birth order and, 5946
blood circulation disorder and, 141 birth order and, 5946 blood circulation disorder and, 1412 content, 2488 pressure and, 4157 body type and, 2490, 4120, 5920, 5924, 6388 6.188 weight, 1944 brain lesion, 1908, 3546, 4770, 4775 bromine, 6440 care, 1438, 1956, 4191, 4746, 4758 administration, 6448

boarding system, 5960 colony, 5308 England, 6446 England. 6446
family, 4810
hospital, 1956
journal, 3271
Missouri, 6418
rural, 6414
Switzerland, 816
castration, woman, 5906
cerebellum and, 2485
child, 830, 4787, 5917
chorea and, 2462
chronazy and stimulus, 3854
classification, 322, 1913, 1918
communicated, 2446, 4140, 6409
crime and, 263, 1955, 2055, 3682, 4277,
5338, 6425
culture and, 314 culture and, 314 delusions, 5314, 5315 determinants, 328, 1457, 1906, 2487, 6427, 6437 determinants, 328, 1457, 1906, 2487, 6427
6437
organic, 5357
social, 1463
diagnesia, 4772
disease and, 260, 282, 1377, 6399
divorce and, 6405
dream and, 317, 6439
ecology, 4089, 4121, 5923
emotion and, 2468, 3013, 5907
encephalitic, 5371
examination, 306
recording, 6147
folklore, 1579
food habits, 2965
frontal lobe, 6419
genius and, 6393
habit training, 3015
handwriting, 432
heart activity, 5367
rate and emotion, 5968
heredity, 324, 834, 1389, 1435, 1911, 2991,
4773
apparent, 4101, 4102 apparent, 4101, 4102 apparent, 4101, 4102 review, 2990 hormone and, 3009, 4082, 4752 incidence, 813, 5913, 5938, 6452 Germany, 5320 Maryland, 5310 negro, 6417 Palestine, 5328 parent marriage age and, 2453 Russia, 3565 Russia, 3565
Switzeriand, 3534
trend, 5333
industrial unrest and, 6431
influenza, 6458
intelligence in, 3198
involutional, heredity, 2437
labyrinth in, 4793
laterality and, 6306
law, 1920
Denmark, 1924
lighter, 4166
maternal, child adjustment and, 5317
memory and, 6415
mirror behavior in, 832
mixed, 5298
observation, 315 mixed, 5298
observation, 315
paraphrenic, 2443
parapsychology and, 5292
primitive, 3936
prison, 1439
psychoanalysis and, 5301
puerperal, 5297, 5329, 5952
reactive, 1932 puerperal, 5297, 5329, 51 reactive, 1933 recreation in, 4796 reflexes, 4785 religion and, 1420, 5300 respiration in, 6349 Rorschach in, 5978 season and, 3462, 3561 self relation in, 264 senile, 1383 acras disordera in, 4768, acras disordera in, 4768. senile, 1383 sense disordera in, 4768, 4769 sex perversion, 5953 simulation, 4800 sleep, drug effects 330 social conflict am., 4776, 5945 appeach, 4805 speech, 4805 soliloquy, 4170 sprue, 4743 startle pattern, 771 swallowing behavior, 4118 symptomatic, review, 4093

syphilitic, 319 tests in, 4819 theory, 5369, 5910 thought, 1434 tooth anomaly and, 1417 toxic, 270, 1952 tooth anomaly and, 1417
toxic, 270, 1952
postoperative, 4068
traumatic, 312, 852, 4129, 4818, 5374, 6406
treatment, 333, 1406, 1409, 1914, 4095,
4176, 4756, 6377
England, 2434
shock, 5951, 6375, 6387, 6450
sleep, 5344
social, 4753
surgical, 4801
Sweden, 1962
thyroid, 5955
Van Gogh, V., 5423
visual factors, 4165
pursuit in, 2491
war, treatment, 3587
Wilson's, heredity, 5370
(see also Chorea, Delusion, Epilepsy)
Psychotechnics, 3149, 4313
bank, 6060 bank, 6060 Canada, 6082 Germany, 3686 interneship, 3142 Italy, 6582 Japan, 6588 journal, 2753 railway, selection, Sweden, 2065 Rumania, 6063, 6079 Rumania, 6663, 6079
signal recognition, light adaptation and, 123
(see also Industry)
Psychotherapy, 266, 311, 3182, 3416, 3579, 4187, 4804, 5363
amblyopia, 3918
casea, 2939
child, 5299, 6117, 6385, 6680, 6681
congress, 3533
Denmark, 1903
gynecology and, 841
industry, 5531
intuition in, 168
medicine and, 4080
neurosis, 3526
paranola, 295
personality and, 835
primitive, 3617, 5411
reading in, 843
relationship, 4128
Rumania, 4813
scope, 271
short-time, 5927
skin disorder, 3578
social work and, 2414
teaching of, 4811
technique, 4932
theory, 280, 399, 4827, 5355, 5926
totalitarian, 6383
tuberculosis, 4106
(see also Psychiatry, Psychoanalysis) signal recognition, light adaptation and. tuberculosis, 4106 (see also Psychiatry, Psychoanalysis) Puberty, characteristics, 6131 praecox, 5846 Puberty, characteristics, 6131
praecox, 5846
brain tumor and, 318
case, 5947
Punctuality, determinants, 4834
distribution, 386
ex difference, 338
Punishment, child training, 6086, 6123
crime and, 916
habitual, 6574
individualisation, 3681, 4283, 6566
learning and, 144, 145, 146, 1202, 1207, 1214, 1251, 1256, 6283
reward and, 1206
for success, 3939, 6291
Pupil, eye, accommodation process, 5762
reaction, 1156
acetylcholine effect, 1888
bird, 1893
conditioning, 1180
cortex, lesion and, 1097
dark, 1790 dark, 1790 light and, 1285 night and, 1285 nerve supply, 6213 rigidity, 4030 tendon reflex and, 3415 review, 6250 achool, behavior problem, 544 classification, 3724 (see also Eye, School, Student, Teacher

Quality problem, 1043
Question, child, 5603
Questionnaire, personal experience, 4196
validity, 2145
Quintuplets, 1669
growth, 3203
intelligence, 1670
social development, 1671
speech, 1674
training, 1672, 1673
zygosity, 1702 Rabbit, conditioning stability and sex dominance, 1192 cortex control, placing, 1743 strychnine effects, 2241 strychnine effects, 2241 fetus movement, 990 hypophysis and ovulation, 2246 locomotion and muscle section, 2930 olfaction, drug effect, 1801 food and, 1802 inflammation and, 1803 respiration and, 3374 retina potential, 1775 sex behavior determinants, 2356 tope complex response, 1183, 1191 sex behavior determinants, 2356
tone complex response, 1183, 1191
visual cortex, 2264
curve, 1117
development, 132
Race, adjustment and, 1436
art ability and, 6524
attitudes, 899, 5456
change, Germany, 5444
characteristics, Bali, 6034
consciousness, German, 4848
negro, 3062
constitution and, review, 342, 1535, 1536
crime and, 4281
differences, 3620
blood content, infant, 5608 erences, 3620 blood content, infant, 5608 death rate, seasonal, 4888 eidetic imagery, 1563 Europe, 2554 intelligence, 1855, 2663, 4660 mentality, 5412 motor ability, child, 3099 music, 3625 perpenyation, 4048 motor ability, child, 3099
music, 3625
perseveration, 4918
reaction time, child, 576
rhythm, 4867
child, 2186
taste, 444, 1115, 6252
word association, 3048
distance, education and, 5451
reactions, 382, 5446
eminence and, 6540
gypsy, habits, 375
hygiene journal, Germany, 3286
identification, music, 1574
life course and, 5418
likeness coefficient, 897
literature and, 5414
minor, Germany, 6035
mixture, Anglo-Chinese, intelligence, 6507
mental effects, 6495
Nordic, characteristics, 4881
performance and, 5998 Nordic, characteristics, 4881
performance and, 5998
psychology, 1564, 6012
purity, 5460
relations, South Africa, 2558
suppression, effects, 399
temperament and, 4225
theory, 5996
types, Slavic, 5442
vocational aptitude and, 5415
(see also Anthropology, Chinase, Indian,
Negro)
Radio audience research, 4824
482, 4923,
5513 child and, 5047
education and 543, 5003, 5000
habits, 624
intelligence and, 4639
interst, child, 972
lear st, child, 972
reseting, 3701
population, 3 child and, 5047

br

dr

for

fru gra ho lal

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m

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Rating

en

ho

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Readii bi

benzedrine and, 4723, 5235 drug effect, 240, 1340 light and, 3992 social stimulation, 1548 thyroid and, 2902 yeast and, 6324 brain, brightness discrimination and, 3882, 6279 6279
maze learning and, 6275
orientation and, 3881
problem solving and, 3957
retention and, 4635
drive, learning and, 3932
emotion, heredity, 1002
stereotypy and, 761
urine secretion, 5864
food choice rephilis and, 1337 food choice, rachitis and, 1337 vitamin, 237 taking rate, 207 frustration, 1254 grasping, 1308 grasping, 1308
cortex control, 1282
hormone and sex impotence, 5263
labyrinth ablation, 1842
learning, 180, 1227, 3956
conditioning, maze va., 1265
muscle potentials and, 1216
cortex and, 65, 735
drug effect, 733, 1239, 1241
hunger and, 141, 4618
insight, 177
rachitie effect, 194 insight, 177
rachitis effect, 194
social stimulation, 1258, 1514
retention, 193
trial and error, 2865
vitamin B and, 714, 1252
loudness threshold, 6244
maternal behavior, cortex and, 1046 hormone and, 1307 motivation, mase, 5205, 6280 stomach and, 6350 stomach and, 6350
number discrimination, 725
orientation, maze, 3949
path choice, 715
pattern discrimination, 1121, 2821
regression, 1244
relational choice without experience, 688
response habits, 1261
sex activity, castration and, 247
hormone and, 196
cycle, acetylcholine and, 4680
drug effect, 4696
light and, 4695
time discrimination, 694 light and, 4695
time discrimination, 694
vibration threshold, 120, 3404
vision, brightness discrimination, 191
cortex control, 709
defect, heredity, 1134
depth perception, 707
first, 1135 progimity in, 5175 weight discrimination, 3909, 3927 Rating, affective, 1297 Rating, affective, 1297
errors, 2289
employment, NYA youth, 1609
house mothers, 6594
methods, results, 5392
personality, child, 6475
photographs, 4307
reliability, 348
scale, chimpansee, 6467
personality, 1494
police functions, 4284
social workers, 3707
teachers, 504, 1642
scholarship prediction from, 349
(see also Judgment)
Reaction vs. atimulus intensity, 5251
time, 3451
altitude effects, 228 e, 3451
altitude effecta, 228
body rotation, 3987
brake, 225, 4296, 5246
child, 3464
child, race difference, 576
clam, 5878
correlates, 3456
curve, 2363
drug effect, 5229
fatigue and, 2377
intoxication and, 4020 intoxication and, 4020 start of race, 243 temperature and, 2907 type, 1871, 2364 Reading apparatus, 6394 brain potentials, 2776

child, 572, 2647 child, 572, 2647 guidance, 2023 college teacher, 4977 comprehension, 1569 decrease, 5459 depression and, 1584, 3117 decrease, 3439
depression and, 1584, 3117
determinants, review, 2516
difficulty levels, 4985
disability, 381, 1625, 2000, 2135, 4323,
5002, 6014, 6049, 6539
adult, 6518
child guidance approach, 4367
eye conditions and, 6237
familial, 6423
first grade, 4362
hemianopia and, 678
high school, 4979
hypophrenia, 3725
physique in, 5997
(see also Word blindness)
ease, 4916
Cyrillic vs. Roman, 5992
type, 4235, 4236
eye movements, 441, 3115, 3360, 4899,
4926, 4930, 6043
muscle balance and, 1840
handedness and, student, 952 handedness and, student, 952 high school, 539 illumination and, 2315 intelligence score and, 6113 interest, 2021 high school, 1646 learning, 4852 learning, 4852
magazines, 3081
materials, college, high school, 5579
vocabulary, 4351, 5011
meaning and, 5474
music distraction, 1997
span, 3656
oral, speed, 6548
phonics and, 4337
pictures and, 5005
primary, 2655, 5022
radio and, 5445
readiness, 4436
information and, 4350
tests, 4990 tests, 4990 remedial, 843, 2532, 4332, 5546, 6491, 6604 cinema technique, 5994 college, 6536 drills, 4347 dull child, 2648 eye movement training, 6538 high school, 500, 505, 2100, 2142 results, 1627 tachistoecope in, 545 review, 2630 speech vs., pitch, 6506 speed, presentation form and, 4983 student, 3168 teaching, 2098, 2659, 3750 hypothessia, 3554 hypophrenia, 3554 tests, 943, 2104, 2105, 2146, 3249, 4386 tests, 943, 2104, 2105, 2146, 324 critique, 1613 instruction, 3109 length and reliability, 6660 review, 2579 universality, 6627 vision and, 6039 vocabulary development, 3721 fourth grade, 933 Reality concept, 870 illusion and, 5097 Reasoning, see Thought Recall, incomplete tasks, 6289, 6290 closure and, 2348 eye movements lin, 1259 eye movements in, 1259 eye movements in, 1259 memory trace, 722 perseveration, reminiscence, 5213 pleasantness and, 2350, 4617, 4654 pulse and, 4664 recognition and, 722 story, pictures and, 3238 test, 4976 test, 4976
type, study method and, 4641
(see also Memory)
Receptor, lung, 1782
mesentery, 6257
swim bladder, fish, 6255
Recognition, direction in, 164
disturbances, 1237 face, 4634 handwriting, 1993 memory trace, 722 retroaction and, 1863

social, child, 575 test, 4976 time and, 1249, 2311 word, 938 Recreation, depression and, 3110 congress, 5023 leisure time use, 5405
mental hygiene and, 4744
psychotic patients, 4796
Refex. 2173
altitude effects, 4036, 5887
anal., 3311
auditory, lighting inhibition, 1811
auriculo-genital, cat., 5234
autonomic, brain lesion and, 1082
temperature effects, 1309
Babinski, 3470
brain stem and, 1083
carotid, 748
respiration and, 2361
sympathetic and, 1092
circulation control, 2354
cord lesion and, 4143
defense, dog, 2342
delayed, mathematical theory, 2220
depressed nerve, 642
discharge, 5884
exitability, drug effect, 6194
facilitation, cord asphyxia and, 5256
finger, 2395
galvanic, 2914, 4711
apparatus, 2224
auditory adaptation, 202, 3996
brain potentials and, 1066
conditioning, 3961
cortex lesions and, 5717
crime and, 484, 4949
critique, 1323
depression, 5914
drug effect, 3482
mechanism, 5682
music and, 5262
neurosis, 4173
parkinsonism, 303
pleasantness and, 2385, 3450
reliability, 241
work and, 4728
grap, correlates, 5835
groaning, cortex control, 1763
hypoptrenia, 5932
inhibition of antagonist, 3422 leisure time use, 5405 mental hygiene and, 4744 psychotic patients, 4796 grasp, correlates, 5835
groaning, cortex control, 1763
hypophrenia, 5932
inhibition of antagonist, 3483
summation, 1319, 2245
irradiation, cat, 784
jaw-eyelid, 203, 1894, 4782
Moro, 2916, 5249
growth, 5264
vs. startle, 4009
movement regulation, 4525
muscle potential, 1317
tension and, 786
nerve supply, 641
organization, 4633
patellar, amplitude determinants, 4718
diagnosis from, 4024 diagnosis from, 4024 drug effects, 5141 inhibition, visceral, 1291 introversion and, 3033 types, 4719 types, 4719
placing, cortex control, 1743
plantar, startle and, infant, 567
postural, 4018, 4026
infant, 2694
psychosis, 4785 pulse accelerating, from muscle, 3985 pupillary, 1156 nerve supply, 6213 oxygen lack and, 4729 oxygen lack and, 4729
pigeon, 1893
prendon vs., 3465
pyramidal disorder, 4747
reno-visceral, 3478
resistance, fish, 4691
righting, brain lesion and, 1273
rigidity, 224
secretion, pituitary, 200
sensory, conditioning, 2855
skin stimulation, 1277
spinal bird, 3452
fish, 4692
stimulation effect, 73 stimulation effect, 73 standing as, 2905 temperature and, 4676 traumatic interference, 4030 trophic, 4693 vestibular, 251, 3487, 4039

brain lesion and, 3842
visceral, 4732
worm, 3436
(see also Tropism)
Regions, Australia, child delinquency, 2596
infant death rate, 4411
Balkans, social phenomena, 5402
Belgium, vocational guidance, 2646, 6610
Brazil, crime prevention, 480
California, mental hygiene, 5036
Canada, psychotechnica, 6082
Czechoslovakia, sterilization, 6459
Denmark, blindness, 5160
child clinic, 5599, 5602
psychosis law, 1924
Fiji, intelligence, 414
England, character, 19th century, 5431
mental hygiene, 2433
psychiatry, 2971
psychosis care, 6446
psychosis treatment, 2434
Esthonia, sterilization, 4130
France, rural child abnormality, 5563
Gerece, adolescence studies, 5055
Germany, adolescence, delinquency, 3124
law, 4237
society and, 5592
city child, 980
crime, women, 472
education, 5436, 6505
law and psychiatry, 3088
military psychology, 2727
music, 5982
psychology, 2726, 2728, 6161, 6187, psychology, 454 psychology, 2726, 2728, 6161, 6187, 6586 psychology, 2726, 2728, 6161, 6
6586
psychosis incidence, 5320
psychosis incidence, 5320
psychotechnics, 2611, 3686, 3706
races, change, 5444
minor, 6035
school psychology, 6664
social philosophy, 2007
sterilization, 4114, 4119
women, attitude toward, 2553
vocational education, 3697
Holland, crime, 912
sex, 1591
intelligence, 3097
Hungary, psychology, 1036
India, delinquency, 4287
esthetics, 4908
intelligence test, 1649, 1659, 4392 India, delinquency, 4287
esthetica, 4908
intelligence test, 1649, 1659, 4392
vocational guidance, 5539
Indiana, clinica, 2226
Iowa, psychological laboratory, 1034
Italy, hypophrenia treatment, 2448
psychotechnica, 6582
Japan, music, 4927
ability, 900
psychotechnica, 6588
Palestine, psychosia incidence, 5328
Poland, vocational guidance, 4354
Portugal, vocational guidance, 4354
Portugal, vocational guidance, 6615
Rumania, abnormality, 2431
intelligence test, 5024, 5026
mental hygiene, 6441, 6443
personality inventory, 4812
personnel practice, 4969
psychotechnica, 6063, 6079
vocational guidance, 4978
Russia, attitudea, 2528
criminal law, 6558
family, 2534
industrial psychology, 5537
mental hygiene, 3024
parent education, 3170
psychosia incidence, 3565
science, 6146
Scandinavia, hypophrenia care, 3023 psychosia incidence, 3505
sacience, 6146
Scandinavia, hypophrenia care, 3023
psychiatry, 2454
Scotland, hypophrenia, 3524
neurosis incidence, 5327
population trends, 1520
Sweden, adolescent crime, 6563
child guidance, 2175
homoexuality, 3022
hypophrenia, 1949
incidence, 5312
neurosis care, 1901
psychosis treatment, 1962
railway selection, 2065
sterilization, 277, 2975
Switzerland, psychosis care, 816
incidence, 3534
special education, 1619 science, 6146

sulcide, 6546 Wisconsin, achievement tests, 1641 Regression, child, 1346 hypnotic, 1375 hysteria, 2961 hysteria, 2961
rat, 1244
statistical, 2764, 4472
computation, 42, 1005
Reinforcement, conditioning, 165
external, 5872
Relational choice, monkey, 702
rat, without experience, 688
Relaxation, sleep and, 6323
hypnosis and, 4047
progressive, 4698
Reliability, auditory, vibratory threshold, 2808
constancy and, 4591
examinations, 4353 examinations, 4353 galvanic reflex, 241 judgment, 2288 group, 4909 length and, 6660 maximation, 6639 maze, 172 rank order, 1253 rating, 348 test, 5029 Goodenough, 1660 intelligence, 2179, 6667 psychotechnical, 4395 Rorschach, 3041 Rorschach, 3941 scoring, 1635 theory, 2152 Religion, adolescence, 5616 attitudes, relief clients, 3638 belief, 893 child, 2673 child, 2673
psychology and, 966
conversion, 3640
delusion and, 5348
depression and, 3076
development in, 5399
emotion and, 903
Greek, 3642
immortality, sense of, 5296
intolerance, 3614
Jung on, 2412
marriage and, 6498 marriage and, 6498 negro, 4854, 5407 peace and, 1986 personality and, 6481 prayer, 3054 prayer, 3054 primitive, 434, 1527, 1587, 6028, 6523 psychoanalysis and, 809 psychology of, 2034, 3080 psychosis and, 1420, 5300 Russia, 1565 science and, 2024 Russia, 1565 science and, 2031 sex education and, 3624 shamanism, Indian, 6027 student, 2046, 3744 student, 2046, 3744
counseling, 3730
teaching, 6093
theory, 6543
totemism, Indian, 4874
(see also Mysticism)
Reminiscence, 3441
practice distribution and, 170, 3418
presentation speed and, 3944
recall, perseveration, 5213
retroaction and, 182
Repression, affective, 4164
concept, 1349
dissociation and, 4206 concept, 1349
dissociation and, 4206
(see also Conflict, Frustration)
Reproduction, elaboration, 2875
field conditions and, 1181
presentation order and, 187
unusual conditions, 4657
Reptile, auditory potentials, 3857
brain, 1759 Reptile, auditory potentials, 3857 brain, 1759 migration, sensory control, 2831 nervous system, 1060, 5714 olfaction, 4611 perception, 1155 posture, brain control, 657 sex behavior, 3648 cycle, light and, 3995 territoriality, 3061 vision, form and acuity, 2283 Research, clinical, 329 educational, 2109, 3742 evaluation, 2136 evaluation, 2136 music, 427

philosophy, 4495 reports, biologists, 5087 language and, 3264 psychologists, 4464 Rorschach, 33 social, 906, 5410 error, 5443 test, 2149 test, 2149

test, 2149
group, determinants, 4891
hostility as, 5279
psychoanalysis, 808, 5272
Respiration, 1280
anenthesia and, cat, 2913
apparatus, 1016, 2206, 3267, 3277
blood circulation and, 780, 1881
brain potentials and, 1313
carotid reflex and, 2361
center, 58, 627 carotid reflex and, 2361 center, 58, 627 control, 650, 662, 1293 development, 2383 cortex and, 3332 cat, 5700 development, mammal, 4668 diencephalon and, 6205 drug effect, 757 efficiency and, 760 emotion and music, 1878 excessive, and senses, 113 exercise and, 1270, 2369 susar and, 2353 sugar and, 2353 fatigue and, 4682 fetal, 586, 996, 5832, 5873, 5886 fish, 2375 nan, 2375 hormone and, 765 hygiene, industry, 5499 invertebrate, 1287 medulla and, 5709 mental functions, and, 4038 muscles, synergy, 4679 nerve, 671 olfaction and, rabbit, 3374 psychosis, 6349 recording, 792 sensation and, 6340 stoppage, recovery proc sucking vs. infant, 4434 vagus and, 625, 795 work and, 6297, 6318 work and, 6297, 6318
Response, see Reaction
Responsibility, 3644
adolescent, 475
Retardation, see Hypophrenia
Retention, advertising, 2074
brain lesion and, rat, 4635
conditioned discrimination, 6282
duration and, 3441
massed learning and, 1233
radio, 4619
sub-goal in, 6277 radio, 4619
sub-goal in, 6277
trial and error, rat, 193
(see also Memory)
Retina, blind spot, driving and, 2613, 3151
variability, 4593
changes, determinants, 136
circulation, disturbance, 2798 circulation, disturbance, 2798 constituents, 129 correspondence, abnormal, 3865 fatigue, 75 function, theory, 5747 injury, aviation, 5152 mammal, 6258 metabolism, adaptation and, 2299 off effect, 2255 pigment, 1118, 2320 oli elect, 4233
pigment, 1118, 2320
absorption spectrum, 3827
fish, 1106
frog, 2795
heat decomposition, 5776
hypophysis and, toad, 114
rhodopsin, 6271
rod vision and, 2790
sedimentation, 3883
potential, 2254, 5689
dark adaptation and, 6262
flicker and, 1759
pattern, 1104
single fibers, 2811
stimulation rate and, 1845
rivalry, figure and ground, 1176
vertebrate, 128
vitamin, adaptation and, 5805
Retroactive inhibition, see Inhibition
Review, agnosia and brain dominance, 5949
animal psychology, 2756

aud blin

cha

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come consecrate cycle dead depted dien educate consecrate cycle dead depted dien educate cycle dien educate consecrate cycle dead depted dien educate cycle dien educate cycle cycle

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work
Rorschael
biblic
Binet
blood
brain
child
color
comp
crimi
detail

art teaching, 5564 art teaching, 330-a audition, speech, 2552 blindness, 2303 character research, 6480 teaching, 5560 child, crippled, 3250 exceptional, 2670, 2682, 2693, 5042 -parent attitudes, 4441 commercial teaching, 5567 conditioning physiology, 5510 constitution and race, 342, 1535, 1536 crafts teaching, 5548 cyclothymia, 267 deafness, 2306 partial, 2302 depth perception, 5756 diencephalon, 3306 education, preachool, 4989 primary, 5004 educational psychology, 5541 English teaching, 5576 extrapyramidal disease, 4072 eye movement, animals, 3405 films in psychology, 3255 frontal lobes, 1081 health teaching, 5552 heredity of psychosis, 2990 hypophrenia, 5929 infant behavior, 2676 intelligence test, non-verbal, 6671 language teaching, 5581 laterality, 6312 laterality, 6312 audition, speech, 2552 blindness, 2303 laterality, 6312 learning, primates, 1860 literary form, 4902 locomotion, 3990 mathematics teaching, 5550 memory, affective bias, 2333 span, 2327 music research, 439, 1559 teaching, 501, 5404, 5565 myopia, 6246 neurasthenia, 848 neurology, 3574, 3843 pain theory, 6229 personality tests, 6482 pain theory, 6229 personality tests, 6482 pituitary, 5880 psychology, 1837, 3784 psychophysics, 3394 psychosis, symptomatic, 4093 pupil, 6250 passing, 2620 pupil, 6250 reading, 2630 reading determinants, 2516 tests, 2579 school subject methods, 6618 science teaching, 5571 social science teaching, 5585 speech pathology, 2550 statistics, 5633 special patriology, 2550
statistics, 5633
twins, psychiatry, 5958
unemployment effects, 4865
voice, 5395
work physiology, 5831
(see also Bibliography)
Reward expectation, chimpanzee, 718
job, 927
learning, 1256
token, dog, 1201
Rhythm, diurnal, 5265
plant, 5244
double, nerve response, 637
drug addiction, 5707
group work, 2891
heart, 198
imposed, in work, 209
infractions of the serve response o group work, 2991
heart, 198
imposed, in work, 209
induced, animal, 4027
light, 2793
mental, 236
musical, 6520
race difference, 2186, 4867
sound and, 3671
sucking, infant, 4434
work, 4669
rachach, arthritis, 336
- bibliography, 366, 6476
Binet vs., 4213
blood type and, 5384
brain tumor and, 355
child problem, 363
color fantasy, 3039
shock, 6483
compulsion neurosis, 4208
criminals, 2059
details, normal, 1481 details, normal, 1481 education and, 1981

frontal lobes and, 869, 1443 hypophrenia vs. schizophrenia, 1444 interpretation, 2514, 4840, 6472 nervous disease, 357 central, 3042 paresis, 1946 personality change, 1492 – Pick's disease, 859, 865 psychosis and, 5978 psychosis and, 5978 reliability, 3041 research, 33, 1470, 6479 schizophrenia, 4209, 5386 scoring, 346, 4202 samples, 1469, 6468 technique, 3605, 5380 theory, 1484 twins, 1499 types, 3599, 4201, 4203 validity, 5379, 6470 Rural, see Country Sales ability, correlates, 5538 personality and, 6579 photographs and, 4307 tests, 3139, 3143 interest, 6061 analysis, 6065 interview technique, 6077 letters, 6062 setters, 6062 remuneration, 2077 Salivation acidity, correlates, 5892 food and, 752 hypnosis, 2411 nerve activation, 6322 Sampling, double, 3278 items, 2738 theory, 3807 Scale construction, 347, 1035, 1650, 1735, 2151, 2237 learning data, 2885 light reflection, 3412 social maturity, 1525 speech acceptability, 4272 studiousness, 6112 (see also Test) (ace also Test)
Schisophrenia, brain changes, 3000
classification, 3532, 6380
conditioning, vascular, 5343
constitution, 1472
determinants, 3566, 4099, 4789
social, 821
treatment, 5321
diagnosis, 1910, 2470, 4083, 4145
drawings, 284
fatigue, 4766
hallucinations, 4783 fatigue, 4766
hallucinations, 4783
eidetic imagery and, 316
heart activity, 5367
pain and, 1390
heredity, 302, 1466, 4830
histories, 1489, 6398, 6464
homicide, 2591, 6447
hormone disorders, 4184
hysteria and, 1421
imagery, 5916
instinct and, 6386 inagery, 3910 instinct and, 6386 intelligence, 1376, 1392, 3016, 6442 scatter, 5030 late, 2493, 6420 motor function, 1442, 2962, 4064, 4182 onset age, 1455 orientation, 4111 physiognomy, 4090 prognosis, 6404 prophylaxis, 2998 psychoanalysis, 4183, 5337, 6461 research, 5359 response strength, 5354 Rorschach, 4209, 5386 vs. hypophrenia, 1444 simulation, 1422 speech, 5375, 6390 symptoms, 4764, 4767 child, 4779 compensation withdrawal, 4160 delusional, 1931 delusional, 1931 ahyness, 5377 thought, 278, 1445, 1927, 3535, 5302 treatment, 1405, 1912, 3551, 4087, 4091, 4117, 4163, 4180, 5313, 5360, 5365, 5372 brain section, 310 cardiazol, 2960, 5909 memory in, 5919 insulin, 822, 846, 847, 2952, 2977, 4162,

4762, 4784, 4808, 4821, 4826, 4601, 6408, 6445 association in, 6460 brain potentials, 2257, 3318 psychoanalysis in, 2402 work, 4903, 5376 (see also Catatonia, Paranoia) Scholarship, absence and, 5574 adjustment and, 2099 activity school, 3180 aid and, 959 basel and 2, 959 basal age and, 1664 beauty, marriage, woman, 4880 class size and, 508 college, uniformity, 6665 college, uniformity, 6005 family conditions and, 3164 fluctuations, 5551 high school, life success and, 4370 homework and, 4335 immigrant child, 2130 Indian, 398 intelligence and, 511, 3731, 6110, 6650 intelligence and, 511, 3731, 6110, 6650
college, 6602
junior college, 6091
mathematics ability and, 2882
prediction, 1683, 6645
college, 538, 2137, 2632, 3716, 3737,
6106, 6109, 6600
dental school, 2113
medical school, 3727
ratings, 349
sex difference, 3177, 3728
study method and, 509
teaching success and, 540
vacation loss, 947
vision and, 3398
(see also Achievement, Marks)
ool absence, causes, 2112 vision and, 3398
(see also Achievement, Marks)
School absence, causes, 2112
effects, 5574
acceleration, social effects, 1645
adjustment, 935, 950, 2143, 2653, 6098
bilingualism and, 2030
New York, 3680
aptitudes, 554
behavior problem, 5079
blackboard, light-colored, 2138
discipline, 3738, 5054
extracurricular activity, correlates, 6104
hearing conservation, 1787
homework, scholarship and, 4335
hypophrenia and, 512, 2127
intelligence teat, 2126
lighting, 1825, 3375
nursery, 3190, 3743
attendance effects, 4436
insecurity and, 6118
Russia, 3170
placement, 948, 3724, 5580
criteria, 522
promotion rate, 3183 promotion rate, 3183 neuroticism and, 4832 propaganda, effect duration, 5572 propaganda, enect duration, psychiatry, 6436 psychology, 934 Germany, 6664 punishment, 6086 retardation, transients, 3657 selection, 3718 selection, 3718 size, test score and, 2141 subject, chemistry, intelligence and, 2102 test, 3720 test, 3/20 disabilities, 4360, 4385 geography, blindness and, 3723 history, psychology of, 3633 interest, 2633 major, marks and, 2649 physics, teaching order, 516 teaching, 3173 review, 6618 transfer, 2643, 5570 transfer, 2643, 5570
typing, tests, 5510
tests, 4981, 5583
vacation loss, scholarship, 947
organization, 1622
(see also Marks, Teacher)
Science curriculum, 6653
ethics and, 2568
general, as preparation, 2107
history, 1718
language and, 6510
marks, prediction, 4344
methods, 6169
review, 5571
nature of, 5
postulates, 13

orientation, 4501 Russia, 6146 textbooks, content, 955 theory, 5112 Scoring, combinations, 6186 method, teams, 6160 method, teams, 6160
Season difference, race, death rate, 4888
psychosis and, 3462, 3561
Secretion, gastric, 4684
nerve impulse and, 1864
Selection, accident prevention and, 6577
aviation, 3689
executives, 3527
foreman, 2081
gifted, 5455
industrial, 490, 3690
aptitude tests, 2072
military, 5507, 6583, 6590
liaison officers, 6591
railway, 2609
Sweden, 2065
school, 3718
intelligence test and, 5542
tests, 493 tests, 493 industry, 4300, 6072 worker, type tests, 6576 Self aggression, 2995 attitude, 4211 attitude, 4211
concept, adolescence, 5056
control, physiological, 6303
imagination, 4473
reliance, 1498
adolescence, 5066
Semantica, see Meaning
Semi-circular canals, see Labyrinth Semi-circular canals, see Labyrinth Sensation, 3410 altitude effects, 228 body, 3923 chronaxy, 4514 concept, 4486 conditioning, 716 control, migration, turtle, 2831 cortex and, monkey, 668 cortex and, monkey, 668
data, 5184
diaphragm, 690
disorders, 4559
pruritus, psychogenic, 6394
psychosia, 4768, 4769
epicritic vs. protopathic, 4590
experiments, 1161
hyperventilation and, 113
insect, 4577, 4599, 4613, 6248
interpretation, 31
irradiation, 89
modality, judgment and, 1217
temporal pattern discrimination and, 2803
organs, bird, 4531 organs, bird, 4531 insect, 1142 regeneration, bird, 4515 spider, 4548 pregnancy, 84 projection, 3926 research methods, 3395 respiration and, 6340 subjectivity, 2836 summary, 6162 waking, 1153 wetness, 4570 (see also Hearing, Proprioception, Touch, Vision) Vision)
Set, learning and, 2339
response and, 3297
Sex activity, 2036
adolescence, 998 determinants, rabbit, 2356 frequency, male rat, castration and, 247 247
hormones and, 196, 1272, 6341
rat, 4696
lizard, 3646
olfaction and, quinea pig, 1314
stimulation and, 4034
toxin resistance and, 5226, 6296
type, protosoan, 4010, 4011
vision and, amphibia, 3989
woman, 373
adjustment, 4845
marriage, 3057
student, 6492
asociation, education factors, 5049
attitudes, 2565
censorahip, 4263
changes, 2536
commercialised, 2530

custodial education and, 486
intelligence, instability, 6532
paychoanalysis, 1345
customs, Oriental, 4239
cycle, acetylcholine and, rat, 4680
body potential and, chimpanzee, 2366
light and, bird, 3991, 5151
fish, 217, 3991, 5151 fish, 217 hypophysis effect, 3446 rat, 3992, 4695 turtle, 3995 delinquency, 3120, 3122, 3126, 3128, 6567 alcoholism and, 477 child, 470 Holland, 1591 hormone and, 4952 incest, 474 child of, 299 laws, women, 4951 psychiatry and, 4954 treatment, 4280 psychiatry and, 4954
treatment, 4280
delusion, 1915
development, 2548
girl, 6359
stages, 2418
difference, behavior, child, 3215
child attitude toward, 3515
color mass, 3906
handwriting, 2562
heart rate, stuttering, 4907
intelligence, 2663, 3946
punctuality, 338
scholarship, 3177, 3728
skin temperature, 238
social adjustment, 1436
taste, 115
dimorphism, hermaphroditism, 2920
disturbance, 823, 3517, 4109, 6396
exhibitionism, case, 6556
castration therapy, 5349
female, 431, 6433
hormone and, 5250
rat, 5263
individual psychology and, 812
male, 269
dominance, conditioning and, rabbit,
drive hormone and, 4604 dominance, conditioning and, rabbit, 1192 drive, hormone and, 4694 education, 3709
missionary, 3624
habits, bird, 5255
masturbation, 2521
beliefs about, 895 child, 1697 hormone, 5843 fish reaction, 5844 increase, old age, 4022 interest, 3505 child, 6133 linkage, 4085 needs 403 child, 6133
linkage, 4085
needs, 403
organs, female, sensitivity, 3347
perversion, depression in, 2481
fetishism, 1344
letter writing, 1592
masochism, 2416
theory, 5285
pedophilia, 1426
psychosis, 5953
sadism, 2459, 4759
child abuse, 1597
theory, 5285
transvestism, case, 6462
pleasure, evolution, 5268
precocity, 5846
hydrocephalus, 5921
seduction effect, child, 1667
symbolism, 2020
(see also Boy, Girl, Love, Woman)
Sibling number, intelligence and, 4260, 5819
relations, sisters, 3222
rivalry, 2155
Similarity, definition, 613
Simulation, anesthesis, 1921
detection, 2460
pain, 2274, 2279
psychosis, 4900
test, 3591
visual, test, 5727
Sinistrality, see Handedness test, 3591
visual, test, 5727
Sinistrality, see Handedness
Size constancy, 5774
comparative study, 3902
vs. form perception, 1843
Skewness distribution, 2722, 2734, 2743, 2767
test, 2715, 2716, 2740
Skill, hierarchical, typing, 2332

lack of, 6339 manual. age and, 5588 test norms, 5589 measurement, basketball, 2116 studies, 2362 studies, 2362
marksmanship, test, 930
training, 6599
vocational, practice, 2617
(see also Co-ordination, Mechanical
ability)
Skin disorder, psychotherapy, 3578, 5269
resistance, attention and, 1271
correlates, 2928
muscle tension and, 4688
sleep, 204
sympathectomy and, 5712 sympathectomy and, 5712 secretion, sympathetic and, 667 senses, 1839 apparatus, 6177 mutual influences, 6230 mutual influences, 6230
nerve supply, 3324
organs, 3323
thresholds, brain lesion and, 3380
female sex organs, 3347
tickle, distribution, 3383
shivering, determinants, 5863
stimulation effects, electric, 215
reflex, 1277
temperature, cortex and, 2265
regulation, 5881
sex and time differences, 238 regulation, 3881
sex and time differences, 238
tonus and, frog, 1311
(see also Cold, Heat, Pain, Touch)
Sleep, abnormal, 475
brain circulation, brain circulation, potentials, 632, 1054, 1055, 3314, 6208 disorder, 783, 2986 hormone and, 1876 treatment, 1932, 4786 enuresis and, 6343 hearing and, 700 muscle potentials, 781 needs, constitution and, 5903 onset, 4724 posterior de la compartica de la compart tneory, 3409
toxins, 767
treatment, psychosis, 5344
twins, 5851, 6679
(see also Dream, Waking)
Smell, see Olfaction
Social ability, child, 5990
handicap and, 1511
heredity and, 273
hypophrenia, 274, 1384, 1397
scale, 384, 1525, 2028
adjustment, 4217, 6527
child, accelerated, 1645
preschool, 2174
emotions and, 1436
attitude, 371, 2084
child, 6015
correlates, 1545
nationality and, 5456
student, 1529, 2578
attraction, factors, 4844
research, 418
behavior, 2013 research, 418 behavior, 2013 adolescence, 588 animals, 6484 bird, 4864 child, 559, 987, 997, 2672 class, 4356 comparative approach, 1552 fish, 3659 hah, 3659 horse, 3612 initiation, 891 invertebrates, 3098 isolation effects, 2022 list, 1530 nst, 1330 observation, 1506 paranoia in, 2972 personality and, 5403 schizophrenia, 821 technology and, 1518 war, 5438

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Sociolog

Par stat

Sorcery, Sound a

co-operation, 5396 child speech, 1693 distance, adolescence, 2176, 2180 common relationships, 4873 race, 5446 dominance, mouse, 4268 education, 3166 dominance, mouse, 420s
education, 3166
environment, 6016
event, prediction, 4900, 5993
facilitation, co-ordination, 29.32
intelligence, motor performance, 3984
judgment, 1508
learning, rat, 1258, 1514
motor performance, 1504, 1548
group, industry, 4315
succession, 5417
theory, 4901
statistics, 6023
village, 6021
growth, adolescence, 5592
quintuplets, 1671
ideals, 1583
influence, individual, 1557 ideals, 1583 influence, individual, 1557 institution, person and, 2005 psychology, 1419 isolation, effects, 2022 paranoia and, 6434 issues, student attitudes, 5448 norms, origin, 4539 orenvisction, animal, 433 organization, animal, 433 Balkans, 5402 crime and, 4940 child, 6020 child, 6020 distribution, 5995 England, 19th century, 5431 hypophrenic, 3590 Indian, 3649 technology and, 1518 theories, 885 personality, disturbance, 345, 2455 philosophy, 1570 Germany, 2007 poise, 367 poise, 367
progress, concept, 2763
psychology, 2527, 3051, 4252
attitude measurement in, 1543
field theory, 1513
individual differences in, 1555
Mead, G. H., 1996
methods, 1512, 1523
military, 5401
textbook, 421, 4259, 5562, 6017
theory, 404, 1505, 1513
vocation and, 1568
recognition, child, 575
research, 906, 5410
error, 5443
theory, 5085 research, 906, 5410
error, 5443
theory, 5085
revolution, leader personality and, 3085
psychopathy and, 2004
science essays, 882
lag, 4898
law in, 4894
review, 5585
symbolic logic and, 5107
success, college, 4859
therapy, psychosis, 4753
usage test, 3111
work ability, 4295
rating scale, 3707
abstracta, 1984
child, 2674, 3247, 3672
depression and, 3086
diagnosis in, 2535
education, 1620, 3662
group, 4925
Indian, 2561
principles, 4896 Indian, 2541
principles, 4896
prison, 2057
psychology in, 1534, 2547, 2559, 2574
psychotherapy in, 2414
records, 4875, 5406
short contact, 4273
standards, 4318
(see also Group)
Sociology dissertations, 872, 6486
essays, 420
Pareto, V., 376
statistics, 394
status, 2041
Sorcery, see Magic
Sound analysis, 452
combination, cochlea effect, 1125
pitch, 5750

response, dog, 1189 rabbit, 1183, 1191 control, piano, 425 deafening effects, 5183 hearing and, 6235 metabolism and, 2390 nearing and, 0233
metabolism and, 2390
distortion, ear, 2851
extra-auditory, 2292
fatigue effect, 2080
labyrinth stimulation, 5788
localization, 3413
meaning and, 2556
measurement, 6171
faint, 79
noise, 4609, 5157
moving, 2273
music and, 5471
production apparatus, 3299
shrimps, 6353
properties, 5176
recording apparatus, 1715
rhythm discrimination, fish, 137
sharp reports, 6240
strengthening, 131 sharp reports, 6240
strengthening, 131
study, cultural possibilities, 2819
transmission, 3915
bone, 3893
middle ear, 712
(see also Ear, Hearing)
Space concepts, 5639
origin, 5794
effect, time perception, 3339
manipulation training, 1601
perception factors, 3342
time effect, 3341
touch, 2312, 3365
visual, 6268
relations, child, 5607
direction, monkey, 3350 relations, child, 5607
direction, monkey, 3350
sensory, 3397
(see also Depth perception)
Span, memory, effect and, 5807
music reading, 3656
pattern and, 2325
visual, age and, 704
eye dominance and, 1150
Speech, 4220
abbreviation system, 380
acceptability scale, 4272
animal, 889, 4884, 5203
articulation, 2002
psychic effects, 6512
basis, 1562
centers, brain, 63, 3856 basts, 1962 centers, brain, 63, 3856 child, 5050 Chinese, 1698 r sound, 6029 r sound, 6029
sentence expression, 5045
siblings and, 1682
social function, 1693
consonant, Icelandic, 4221
counting, rapidity, 2037
deaf child, 93, 6253
development, 3101, 4270, 6513
disorder, 416, 879, 1573, 2541, 5468, 5473
aggression and, 4928
cleft palate, treatment, 6045
glossolalia, case, 6455 cleft palate, treatment, 604 glossolalia, case, 6455 hearing defects vs., 5782 infantilism, 4933 laterality and, 1515, 2010 lisping, 6534 motor disability and, 3086 nerve system and, 2052 review, 2550 substitution, 4860 treatment, 4855, 6046 rs, 3118 errors, 3118 child, 3245 function, 3075 internal, 1991 larynx function, 2006 loss, child, 297 nose, child, 297
melody, accent and, 3084
Dutch, 6516
metaphor, psychopathic, 5948
personality and, 3653
phoneme, emotion effects, 3091
latent, 4265
phonetics, errors, 3635
Hottentot, 4850
palate injury and 6026 palate injury and, 6026 psychosis, 4805 public, 1547 audience reaction, 3090

quintuplets, 1674 radio and, 4872 readiness, 1540, 6506 recording, accuracy, 2544 apparatus, 3821 research, 5394 apparatus, 2003 electric, 1531 review, 2552 sound duration, 3065 speed, 6548 speed, 6548 telephone, noise masking, 3389 telephone, noise masking, 3389 textbook, 4866 toneme acquisition, 6513 African, 5439 Chinese, 6519 French, 5467 topics, change, 1507 training, 1985, 2885, 4253, 5449, 6490 child, 437, 3068 paralytic, 1990 cleft palate, 446 deaf mutes, 5988, 6004 hypophrenia, 3577 hypophrenia, 3577 intelligence and, 2862 methods, 6541 nineteenth century, 3105 types, 2038 types, 2038
(see also Language, Stuttering, Voice, Vowel)
Speed, ability, motive, 1255, 2347
constancy, 6259
intelligence tests, 5824
training, child, 1624
Spelling, child letter, 4988
disability, correlates, 3186
marks, 4377
teaching, 2103, 2111
test comparison, 2124 teaching, 2103, 2111
test comparison, 2124
recall vs. recognition, 541
Spinal cord, see Cord
Spiritualism, see Parapsychology
Sport, constitution and, 1333
race and constitution, 4699
shot put, 5245
Stage fright, determinants, 4048
Startle being cathlogue and 245 Startle, brain pathology and, 265 child, 579, 580, 1681 child, 579, 580, 1681
plantar response, 567
introspection, 2370
Moro reflex vs., 4009
parkinsonism, 2948
psychopath, 771, 772
urine secretion and, rat, 5864
Starvation, see Food lack
Statistics, Bessel function, application, 2741
biology and 6182 tistics, Bessel function, application, 2741 biology and, 6182 check, 1023 clinical application, 1020 critical ratio, combination, 5086 difference, significance, 16, 44, 2236, 2765 education and, 3794 evolution and, 3798 fallacies, 1030, 4472 formulae, 6145 golf. 738 graphs, 2221 grouping correction, 2747, 2768 heredity, 6424 hypothesis testing, 2732 hypotness testing, 2732 index numbers, weighting, 5666 mapping, 5114 mathematics and, 517, 5629 mean deviation, class, 6149 distribution, 2731 nomograph in, 1013 outline, 5661 outline, 5661
parapsychology and, 1019, 1039, 3496,
3498, 4051, 4052, 4734, 4736
percentile chart, 5660
psychiatry and, 2976
psychology and, 3795
range distribution, 2736, 2737, 2751
rank order, reliability, 1253
ratio distribution, 2748
review. 5633 ratio distribution, 2746 review, 5633 tables, 5096, 6150 textbook, 1736, 2229, 2697, 3812, 4477, 5674 type determination, 6191 workbook, 4478
(see also Correlation, Error, Forequency, Moment, Reliability, dity, Variability)
Status, see Income

Stereotype, 283
college, 3627
emotion and, rat, 761
opinion and, 3089
Sterilization, Czechoslovakia, 6459
delinquent, 4186
Finland, 6378
Germany, 4114, 4119
history of, 1929
mental hygiene and, 4797
resulta, California, 829
Sweden, 277, 2975
therapeutic, 4280
(see also Eugenics)
Stimulation, acid, frog, 1294
apparatus, 692, 1007
chronaxy and, psychosis, 3854 apparatus, 602, 1007 chronazy and, psychosis, 3854 intensity response and, 5251 schizophrenia, 3554 intervals, repetition and, 1263 irradiation, synkinesis and, 4127 electric, 9 electric, 9 light, pigeon, 1184 mechanical, worm, 5164 rate, practice distribution and, 6284 response and, 3451 threshold, conditioning, 1180 Strabismus, 1178, 3343 divergent. 1120 heredity. 6273 perception in, 5799 treatment, 705, 1795, 3358, 3900, 3914, 5761 twins, 2809 twins, 2809
Stroboscopy, see Illusion, movement
Student, accelerated, adjustment, 4355
adjustment, 3165
factors, 5013
attitude, marks, 536, 4331
marriage, 5398
political, 3066, 5448
social, 1529, 2578
tests, 6019
background, 1637, 6641
deficient, 3169
concepts, 6143
counseline, 1638, 2131, 4999 concepts, 6143
connelins, 1638, 2131, 4999
religion, 3730
disqualified, 3740
handedness and reading, 952
honesty, 515, 3714
inferior vs. superior, 1640
interests, problems, 2129
knowledge, 4357
intelligence score, 5010
leadership, 6533
negro, interest, 3175
opinion, high school, 2625
personality and constitution, 3035
personnel, 953, 3719
psychology preferences, 6661 personnel, 953, 3719
psychology preferences, 6661
reading, 3168
religion, 2046, 3744
sex mores, 6492
teacher, composition ability, 2108
vocabulary stability, 445
vocational choice, 2139
motivation and, 548
teacher, vocational expectation, 5545
woman, objectives, 2686
wishes, 3611
(see also College)
Study habits, scale, 6112
method, 524
college, 6103
high school, 4339
recall type and, 4641
scholarship and, 509
practice distribution in, 523, 6632
skills test, 3191 practice distribution in, 523, 6632 skills test, 3191. Stuttering, 1989, 2017, 2542, 3095, 4922 attitude in, 5428 avoidance reaction in, 5433 bilingualism and, 2044 brain potentials, 2782 case history, 4271 child, 888 determinants, 1580, 2039 treatment, 1567 treatment, 1567 development, 4222 expectancy, 2045, 5429 grammar and, 3052 handedness and, 1868, 2573, 3629 interruption, 5465 perseveration and, 388

self observation in, 5441

SUBJECT INDEX sex difference, heart rate, 4907 theories, 396 treatment, 3631, 3674, 4253, 5408, 5430, treatment, 3631, 3674, 4253, 540
6036
motor, 3658
nineteenth century, 3105
twins and, 374, 4853
word position and, 4857
written language in, 387
Suggestion, art judgment, 4920
persuasion, literature, 5440
scheme, industry, 5518, 5526
self initiated, 2399
susceptibility, 440
child, 4630, 5070
correlates, 362
prestige and, 253, 1550, 4895
thought and, 1250
Suicide, 3669
attempted, 2026
determinants, 6485
fantasy and, 4266
incidence, 430, 6452
letters, 914
menstruation and, 4218
murder and, 487 6036 murder and, 487 murder and, 487
negro, 6031
partial, 2995
personality and, 5970
primitive, 4935
study, 2587
Switzerland, 6546
Summation, binocular, dark adaptation and, 2826
nerve excitation, 1088
pressure stimuli, 3729
reflex, 1319, 2245
Superstition, see Magic
Symbol, 3529, 3979
behavior, monkey, 3933
child, 4419 2826 classification, 6364 dreams, 2944 classification, 0.304
dreams, 2944
incentive, chimpansee, 149, 1197
literature, 4223
process, 3908
sex, 2020
topographic, 424
Sympathetic, see Autonomic
Sympathy, child, 987
Synapse, artificial, 6206
conduction, 1752, 2779, 4508, 5134, 5703
drug effect, 4524
nerve cell bodies, 6225
delay, limits, 5133
structure, 3307
Synesthesia, 1797, 4540, 4579, 5766
color-tone, 1141
type and, 1177
Syphilis, cerebral, 6392
cyclothymia and, 1433
nerve, psychosis in, 319 Taboo, body, 1979
verbal, college, 4241, 4264
Tactile, see Touch
Talent, see Ability, superior
Task completion, 789
recall and, 6289, 6290
interruption, child, 4697
Taste apparatus, 6176
bitter, 2319, 3896
bread, 5514
comparisons, 5781 bitter, 2519, 3896 bread, 5514 comparisons, 5781 electric, 2792 food, 1818 heredity, 5760 hypertrophy, 1838 infant, 5821 insect, 116, 3873 mechanism, 3878 middle ear and, 1800, 2324 preference, determination, 5506 pressure and area in, 6247 race differences, 444 sex differences and, 1113 salts, 2841, 6228 threshold, differential, 5735 race differences, 6252 threshold, differential, 5735
race differences, 6252
temperature and concentration effects,
1157
Teacher adjustment, 4390
attitudes, 2631
child behavior, 2159, 3741, 5021
information, 5557

birth rate, 3621, 6008 birth rate, 3621, 6008
college, annoying habits, 3181
reading, 4977
discipline methods, 3161
judgment, intelligence, 4374, 4629
high school, 1617
pupil, 504
reitability, 348
kneviability, 348
kneviability, 348
kneviability, 348
personality, 2618, 2639, 4378
physical education function, 5008
-pupil relation, vocational school, 1634
rating scale, 1642
role, 528
student, composition ability, 2108 rating scale, 1042
role, 528
student, composition ability, 2108
vocational expectation, 5545
testing by, 6096
training, 6634
bibliography, 4346
psychology and, 2092, 3733, 6630
special education, 3746, 3748
vision standards, 2278
vocational motive, 2628
(see also Education, School)
Teaching algebra, 4340
aptitude test, 2619, 2657
bibliography, 2095, 4330
billingualism and, 6642
business, 2097
composition, oral, 2125
demonstration, 939
English, 6633
Hawaii, 6609 demonstration, 939
English, 6633
Hawaii, 6609
films in, 6111
handwriting, 534
individualized, 4334
judgment, 1632
language, 6025, 6647, 6648
measurement, 3160
methods, 5555, 6623
bibliography, 3174
college, high school, 6100
comparison, 6639
high school, 6087
music, 1571
order, physics, 516
problem solving, 1858
psychological aspects, 2132
psychotherapy, 4811
radio in, 5020
reading, 2098, 2659, 3750
hypophrenia, 3554
religion, 6093
remedial, 4389
psychiatric aspects, 4343 rengion, 0.093
remedial, 4389
psychiatric aspects, 4343
school subjects, 3173
spelling, 2103, 2111
success, intelligence and, 4361
prediction, 537
scholarship and, 540
thought, 6616
vocabulary, hypophrenia, 3586
(see also Class, Education, School)
Telepathy, see Parapsychology
Temperament, see Character, Personality
Temperature, comfort and, 3406
cortex, 2249
ficker fusion and, 4553
industry, 2614, 5499
muscle contraction and, 4677
reaction time and, 2907
reflexes and, 4676
sense, 1839, 3368
apparatus, 6177 sense, 1839, 3368
apparatus, 6177
duration and, 685
fish, 1119
skin, sex and time differences, 238
variation, infant, 562
work and, 4707, 5868, 5869, 3870
(see also Cold, Heat)
Temporal lobe ablation, monkey, 651, 3321
hearing and, 4530
visual field and, 2267
Tension concept. 3781, visual field and, 2267
Tension concept, 3781
emotion and, 2892
muscle, latent time and, 797
length and, 740
problem solving and, 1186
release, 359
sensations, 6326
muscle shortening and, 6325
social, urban, 391
Test, accommodation, reliability, 3382

adv

art :

atti

aud

Ber Bine

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den

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51 avia

achievement, 942, 2636, 3715, 4372, 4387, benzedrine effect, 1706 high school, 4365 intelligence, 550 intelligence, 550 sound films and, 4345 Wisconsin, 1641 advertising, 4303 apparatus, 35 aptitude, 2621 aptitude, 2621
railroad, 2600
selection, 2072
work, 6581
art appreciation, 4233
association, 3591
boy delinquents, 4950
times, 3442
stention, 5818 times, 3442 attention, 5818 attitude, 2560 factor analysis, 5098 item validity, 3067 students, 6019 auditory, 1114, 1126, 2797, 3396, 3874, 5802 5802 aviation, 2908, 3138, 5520 ball and field, emotionality and, 5586 Bernreuter vs. Rorschach, 5978 Binet, pattern, epilepsy, 4084 Rorschach vs., 4213 Bühler, reliability, 3196 character, 6466 chemistry, 3720 chimpanzee, 3982 clerical, 5525 prison, 4278 chimpanzee, 3982
clerical, 5525
prison, 4278
scoring, 551
color vision, comparison, 5785
completion, 557, 4397
comprehension, 1655
construction, 2194, 4394
deaf child, 3899
deception, 1915
admissability, 6562
dentistry aptitude, 489
descriptions, 1458
dexterity, norms, 5589
difficulty, 552, 4391
driving, 2599, 3133, 3693, 4308, 4961, 6074, 6592
, emotional adjustment, 3438 emotional adjustment, 3438
maturity, evaluation, 4836
English, 5543
eye dominance, 1869
factor analysis, 1716, 3755, 3756
fantasy, 2345, 5976
fatigue, pilot, 2075
health awareness, 514
honesty, pupil, 3713
imagination, 6669
industrial, Germany, 2611
selection, 490, 2071, 3690, 4300, 6072
inspector, 3140 selection, 490, 2071, 3690, 4300, 6072 inspector, 3140 intelligence, 555, 962, 3754, 4396, 5590 adult moron, 1400 alpha, 961, 6668 attitude, 2114 Chinese, 1653, 1656, 1657, 1665, 1691 construction, 2662 first grade, 1654 form boards, 2154 Goodenough, 1660, 1663 group, 4651 immigrants, 874 group, 4651 immigrants, 874 India, 1649, 1659, 4392 Kent, 965 Kuhlmann-Binet, 960 language effect, 1219, 2024 prisoner, 6571 reading ability and, 6113 reliability, 1427, 1662, 2179 Rumania, 5024, 5026 school, 2126 selection and, 5542 school, 2126
selection and, 5542
Spanish, 2153
interest, sales ability and, 6061
interpretation, 2661, 2665, 4333
item analysis, 2083, 2194
sampling, 2738
literary appreciation, 6003
marksmanship, 930
mathematics ability, 946, 3710
maze, 3461
mechanical ability, 963, 4300 mechanical ability, 963, 4390 Metropolitan vs. Pintner-Cunningham, 3195

music, 2029, 2035, 2531, 3622, 3647, 4254, 4889 memory, 4906 Seashore, 3650 nurse, 3136 performance, 1658, 1661, 2660, 5027 periormance, 1638, 1661, 2600, 50 review, 6671 personal values, reliability, 5979 personality, 356, 2498, 2506, 5391 adolescent, 3043 behavior problem and, 5009 bibliography, 1487 child, 967 correlates, 5972 cnild, 90.7
correlates, 5972
item selection, 3040
response patterns, 369
review, 6482
usefulness, 867
validity, 3037, 5974
pictures, reaction, 2666
poetry, 2033
Porteus, validity, 1652
practice, high school, 2119
Pressey, phobia and, 5962
programs, 6115
pronunciation, college, 3073
psychology, 6635
psychology, 6635
psychosis and, 3198, 4819
reading, 2104, 2105, 2109, 2146, 3249, 4386
critique, 1613 critique, 1613 length and reliability, 6660 length and reliability, or readiness, 4990 review, 2579 speed, 943 recognition vo. recall, 4976 reliability, 4395, 5029 research, 2149 resistance, child, 4409 resistance, child, 4409 aslesman, 3139, 3143 school, 4981, 5583 aconing errors, 6114 scoring errors, 6114 Hollerith, 3808 reliability, 1635 short answer, 2667, 4393 basketball, 2116 basketball, 2116
social competence, 384, 2028
usage, 3111
Spearman visual intelligence, 2147
spelling, comparison, 2124
recall vs. recognition, 541
study skills, 3191
teacher administration, 6096 construction, 3185
knowledge of children, 6107
teaching aptitude, 2619, 2657
textbook, 5587 transfer, 3980
twins, 5267
type, workers, 6576
typewriting ability, 5510
usefulness, 4982
validity, 2150, 6603
variability, adolescents, 976
vision, aviation, 4314
child, 1828
vocabulary, 944, 2148
vocational, 964
aptitude, 5544, 6595
Germany, 3706
interest, 6657
factor analysis, 6090
work type, 6596
(see also Formboard, Rorschach, Scale)
Testament, tendencies, 377
validity, 6593
Testimony, 140, 231
dream and, child, 5281
eidetic imagery and, 186
elicitation, 1606
handwriting and, 1524
medical, 332
psychopathy in, 1852
value, 5486 transfer, 3980 twins, 5267 medical, 332
psychopathy in, 1852
value, 5486
Textbook, advertising, 2070
business psychology, 2088
child psychatry, 6140
psychology, 969, 3240, 6677
content, science, 955
criminology, 2595, 5478
design, 4916
educational psychology, 3717, 3735, 3736,
5555, 6649
eathetica, 2569 esthetics, 2569 experimental psychology, 6188

workbook, 2213, 5101, 6183 factor analysis, 2228 Gestalt, 6151 Gestalt, 6151
mental hygiene, nurses, 3019
neurology, 1070, 5124
physiology, 3263
psychiatry, 1441, 2476, 5330
nurses, 1951
psychology, 618, 1038, 3260, 3262, 3283, 4453, 4499, 5115, 5116, 5664, 5672, 6168
Germany, 6156
nurses, 5626
personalistic, 2235
workbook, 619, 3809 workbook, 619, 3809 social psychology, 421, 4259, 5562, 6017 speech, 4866 statistics, 1736, 2229, 2697, 3812, 4477, 5674 5674
workbook, 4478
testing, 2110, 5587
vision, 2313
visual education, 519
vocational guidance, 937, 5582
Thalamus, cortex vs., 5127
emotion and, 2374
lesion, 305, 1758
primate, 6223
avadrome, basis, 3589 primate, 6223
syndrome, basis, 3589
Thermal, see Heat
Thesis, see Dissertation
Thirst drive, cat, 208
drug effect, 2888
Thought, abstraction, insight and, 3965
perception, 1554
schizophrenia, 5302 absurdity comprehension, 3975 child, 4630 child, 4630 analogy process, 3951 apparatus, 5667 brain potentials in, 781 child, 3118, 3245, 3763, 4423, 5601 conduct and, 24 direction, 178 forms, 1212 language and, 3422 logic, symbolic, social science and, 5107 mathematics ability and, 2882 perception and, 3772 process, 3947 psychosis, 1434, 4170 psychosts, 1434, 4170 schizophrenia, 278, 1445, 3535 scientific, 3427, 5212 studies on, 3773 suggestion effect, 1250 teaching, 6616 volition, personality, 805 Threshold, auditory, 4571 esnoid, auditory, 4571 light flash and, 6234 rat, 6244 closure, 1112 electric, brain, 5691 form modification, 1799 heat, 2298, 2814, 2815, 3889, 4566, 5174 light, 76 light, 76 imagery and, 5743 variations, 78
olfaction, imagery and, 5744
pain, cornea, 4572
paresis, 4142 paln, cornea, 4572
paresis, 4142
proprioceptive, 5771
measurement, 5770
weight lifting, 1138
sensory, work and, 2285
vibration, 2277, 5772
visual, field and, 5199
Thyroid, activity and, rat, 2902
conditioning and, 5221
defect, cretinism, England, 837
treatment, cretinism, 1385, 2492
myxedema, 3020
psychosis and, 3009
Time apparatus, 19, 4461, 5640
budget, leisure, 5405
child concept, 5034
conditioning and, 3432, 3433
depth perception and, 1836, 2805
disturbance, pathology in, 3372
effect, space perception, 3341
error, loudness discrimination, 3408
neural basis, 2301
experienced, 110
fractionation, 3411
judgment, 1798, 3382, 3391
animal, 694, 1167
depressions, 5340

error, 86, 1319 order effect, 3340 performance, 5742 space effect, 3339 language and, 429 movement perception and, 692, 708 nature of, 91, 610, 3355, 4585, 5627, 5634, 5668, 6159 parallax, 5190 pattern discrimination, modality and, 2803 recognition and, 2311 recognition and, 2311
reversal, film, music, 1136
sampling technique, 2157
study, industry, 5517, 5522
visual recognition and, 1249
Tobacco habit, lobeline effect, 803
learning and, rat, 1239, 1241
longevity and, 2922
Tonic immobility, see Cataplexy
Tooth anomaly, psychosis and, 1417
decay, eruption and, 6129
Touch agnosia, 1140
Touch agnosia, 1140 Touch agnosia, 1140 apparatus, 6178 apparatus, 5776
brain potentials and, 3334
conjunctiva, 2801
illusions, 125, 2293
inner ear, 5185
localization, cortex, monkey, 659
orientation, 699
perception, blind, 4543
percussion, 3891
eense, loss, 281
space perception, 2312, 3365
threshold, hand, 4556
(see also Vibration)
Traffic, see Driving
Trade, see Vocation
Training, aviation, 3689
business, 5554
capillarles and, 1880
nystagmus and, 3454 brain potentials and, 3334 business, 5554
capillaries and, 1880
nystagmus and, 3454
executive, 2068
foreman, 2079
hypophrenia, 3538
industrial, 931, 2078, 2090
infant, 2165
music ability and, 3242
personnel, 3152, 3153
psychology, clinical, 4098
industrial, 5305
teacher, 2092
quintuplets, 1672, 1673
eelf, 6281
dog, 163
transfer, 5570
work, 6597
(see also Education)
Transfer, bilateral, 4627, 6287
conditioning, 1221, 4638
fatigue, 4626
conditioned response, 1260, 2884
educational, 1644, 2643, 4369, 5570
fatigue, 5842
identical elements, 1204
interval and, 5206
psychology, elementary, 1626
test, 3980
Transference aspects, 5900
recognition, 6372 Transference aspects, 5900 recognition, 6372 school, 528 Transient, adolescent, 3094 Transient, adoleacent, 3094
boy, and family eltuation, 5051
Germany, 5999
negro, education, 951
school retardation and, 3657
training, 443
Trauma, cranial, neurology of, 1940
psychosis and, 1937
effecta, 1432, 2463
anti-social, 2445
child, 3564
emotional, child, 2171
nervous, 1450
Tropism, barrancies, 2296 nervous, 1450 Tropism, barnacles, 2296 Darwin on, 2351 fish, 6241 electric, 4535 insect, 4610 growth, 2275 growth, 2275 light, crustacean, 5159, 5800 touch and, 2807 moisture, arthropod, 4001 moilusk, 4725 plant, 2934, 3352, 4583, 4601, 5741, 5767 hereditary absence, 6251

protozoa, 4575 stimulus and, 6328 worm, 4596 (see also Reflex) Twins, behavior, 4717, 6288 brain convolutions, 68 brain convolutions, 68
potential, laterality and, 67
conditioning, 3419
drawing, 5984
finger prints, 4029
handwriting, 5424, 6007
imagery, motor functions, 5267
intelligence, 5827
mechanical ability, 565
mongolism, 296
premature, 6119
psychiatry, review, 5958
research, 5816, 5852, 6094
Rorschach, 1499 research, 5816, 5852, 6094
Rorachach, 1499
sleep, 5851, 6679
startle pattern, 580
strabismus, 2809
stuttering, 374, 4853
telepatty, 3500
zygosity, diagnosis, 212, 242, 5845
(see also Quintuplets)
Tympanum absorption measurements, 3922
lesion effect, 1779
pressure measurement, 3378
vibration frequency, 4606
Type, animal, 1267
bird, 1807
Chinese, 2512
fusion frequency and, 1145 Chinese, 2512 fusion frequency and, 1145 handwriting and, 4232 hysteriform, 3607 intelligence and, 4041 psychosis and, 2490, 5920 reaction time and, 1871 Rorschach and, 3599 statistics of, 6191 study, 1969, 3600 comparative, 1974 comparative, 1974 form and color reaction, 1833 synesthesia and, 1177 vocational guidance and, 2640, 2656 workers, 6576 (see also Constitution) Ulcer, goiter vs., 4159
Umbilical cord loss, premature infant, 4425
Umweg, see Learning
Unconscious, 2409
automatic writing, 1351
ego and, 1359
medicine and, 5333
vocational guidance and, 6084
Unemployment, background, 4407
effects, review, 4865
Urban, see City
Urine inhibition, posture and, 5847
retention effects, 2392
secretion, alarm and, rat, 5864
inhibition, 5260 Vagus connections, 4526 function, 647 heart inhibition, 639 heart inhibition, 639
oxygen lack and, 6337
respiration and, 625, 795
Validity, personality schedule, 1496, 1975, 2145
personnel record, 6578
test, 2150
Porteus, 1652
Value constancy, 4539
experience, 2203
fact vs., 6164
individual differences, 4929
number perception and, 1101
personal, constancy, 3979
Variability analysis, 3266, 5105, 5117
child, 2182
color judgment, 5857 child, 2182 color judgment, 5857 equations, 5647 indices, 4458 learning, 1230 limits, 4481 mental work, 1851 montal work, 1851 motor perseveration, 1967 practice and, 5828 scores, and practice, 4620 Vaso-, see Blood Vegetative, see Autonomic Vertebrate learning, 6278 prehension, 5258

retina, 128
vision, acuity, 1171
foveal, 97, 4568
(see also Amphibia, Bird, Fish, Mammai, Reptile)
Vestibule, see Labyrinth
Vibration, adaptation, 83, 4608
metabolism and, 2390
pressure and, 686
sense, 5186
threshold, 2277, 5772
rat, 120, 3404
stability, 2808
Visual estimation and, 1163
Viscera disorders, psychogenic, 4139 visual estimation and, 1103
Viscera disorders, psychogenic, 4139
esophagus, pain, 1841
liver function, nerve control, 2269
lung, receptors, 1782
stomach, distension and emptying time,
798 motility, insulin and, 2373 motive and, rat, 6350 motility, insulin and, 2373
motive and, rat, 6350
reflex, colon motility, 751
Vision, 2846, 3366, 3367, 4574, 5173
acquisition in maturity, 5740
aids, 2800, 6261
—audition and, 1811
aviation, 2317, 5196
binocular, 1826
blood pressure and, 5726
blue arc phenomenon, 2830
brain and, bird, 3336
mammal, 709, 1068, 1089, 1166, 2264
lesion and, 3373
potentials, 1062
attention, 4532
cat, 5122
brightness and, 105
vs. area in, 5746
monkey, 3377
cells, platypus, 4580
chronaxy and, 4517
conditioning, occipital lobes and, monkey, 5705
configuration, age and, 704 5705
configuration, age and, 704
decay, 122
innate, 1135
conservation, 5166
child, 1835, 5165
curve perception, 713
defect, amblyopia, treatment, £845, 3918
aniseikonia, 80
anopsia, 5783
astigmatism, 1829
change, age and, 5734
aviation, 679
field, 2849 field, 2849 fixation, 5169 hemianopia, 678 hereditary, bird, 2812 psychogenic, 2786 vocation and, 3192 work ability and, 5516 development, rabbit, 132 driving and, 3702 development, rabbit, 132
driving and, 3702
excitation constants, 82
estimation, vibration and, 1163
field examination, 3390, 3875
colored indexes, 1814
methods, 3871
temporal lobe and, 2267
threahold and, 5199
figure fluctuation, 1176, 5787
fluctuation in, 684
foveal, vertebrate, 97, 4368
fusion, binocular, 3407
lateral gaze, 6233
hypophysis and, 3319
illusion, susceptibility, 5194
infant, 2162
insect, 1143, 4565, 5201
labyrinth and, 6430
localization, binocular vs. monocular, 117
egocentric, 1103
malingering test, 5727
mollusk, 5167, 5780
olfaction vs., adaptation, 5748
persistence, 4538
Purkinje phenomenon, infant, 3228, 3236
pursuit, 2491
reading and, 6039
rod, visual purple and, 2790 pursuit, 2491 reading and, 6039 rod, visual purple and, 2790 scholarship and, 3398 sex behavior and, amphibia, 3989 test, aviation, 4314

tex tex the

(see

app cole cra

dar

defi lear

mus myo pay (see Vocabul

bilii biol chil inte lear read

schi stab test trai:

(see ation adju

adv

app

arch atte attit avia bake char

cher

cleri

cour

data

dete expe expe guid

child, 1828 industry, 5197 teachers, 2278 textbook, 2313 teachers, 2278
textbook, 2313
texture, color preference and, 5796
theory, 1817, 1834, 3876, 4537
duality, 129, 3357
worm, 1169
(see also Acuity, Adaptation, Blindness, Cataract, Color, Eye, Flicker, Fovea, Light, Myopia, Retina)
Vitamin, accommodation rate and, 5801
appetite and, bird, 4710
color preference and, fowl, 3393
craving, rat, 237
dark adaptation and, 1830, 4560, 5154, 5171, 5191, 5784, 5805, 6243
deafness and, 6214
deficiency, eye effects, 1776, 3556
learning and, rat, 714, 1252
muscle rhythm and, 6345
myopia and, 5178
psychiatry and, 1462, 3021, 5965 muscle rhythm and, 634S
myopia and, 5178
psychiatry and, 1462, 3021, 5965
(see also Hormone)
Vocabulary, age and, 5823
billingualism and, 3930, 4997
biology, 2654
child letter, 4988
intelligence and, 4992
learning, 2622, 2627
reading and, 3721
books, 2655, 4351, 5011
fourth grade, 933
schizophrenia, 1392
stability, student, 445
test, 944, 2148
training, 1636, 2644
hypophrenia, 3586
(see also Word)
Vocation, accountant, 4382 Vocation, accountant, 4382 adjustment, 3691 adjustment, 3091 college women, 3747 high school graduates, 1631 advertising, 4383 air conditioning, 932 analysis, 4966, 4972 dressmaker, 488 application forms, 2085 aptitude, race and, 5415 tests, 6595 architect, 4384 architect, 4384 attention in, 1616 attitude, adolescent, 6673 apprentice, 2620 aviation, 499 baker, 6655 baker, 6655 character and, 526 chemist, industrial, 6654 choice, girl apprentice, 6097 motives, 2144, 4388 teacher, 2628 student, 945, 2139, 5014 motives and, 548 clerk test, 5525 prison, 4278 prison, 4278
scoring, 551
courses, grades, 3722
data, 3692, 4479, 6643
decorator, 6638
dentist, scholarship prediction, 2113
selection tests, 489
detective, 6637
expectation, teachers college, 5545
experience, motor ability and, 4685
guidance, 513, 527, 958, 2094, 3158, 3159,
3163, 3178, 3179, 3184, 3189, 3753, 4379,
5569 3163, 3178, 3179, 3184, 3185 5569

Belgium, 2646, 6610

bibliography, 3193, 6666
center, Oklahoma, 2215
college, 549, 3726, 5018
courses, 2641
defense, 6108
delinquency, 483, 2588
extension, 6619
Germany, 4995
handwriting and, 6662
hygiene in, 2134
India, 5539
interest in, 4364

india, 5539 interest in, 4364 medical report, 6640 men, 4325 New Jersey, 4366 physical education and, 6601. Poland, 4354

Portugal, 6615 Fortugal, 6615 psychology in, 6659 results, 4993, 5000, 5559, 5568, 5573 Rorschach in, 1981 Rumania, 4978 rural, 2096 social aspects, 2645 test in, 5544 textbook, 507, 937, 5582 training, 6605, 6651 types, 2656 types, 2050 unconscious and, 6084 woman, 5578 work in, 6628 housework, 4324 incentive, wage, 3704 inspector, tests, 3140 intelligence and, 1988 intelligence and, 1988 interest inventory, 3162, 6657 journalism, 4352 medical, 6624 midwife, 2067 minister, background, 1541 nurse, education, 1425 psychiatric, 2954, 2994, 2996 tests, 3136, 6617 office machine operator, 6656 police, rating scale, 4284 radio service, 1614 recognition, 927 rewards, 1602, 1603 sailor, vision, 6585 satisfaction, 3700 satisfaction, 3700
selection, medical tests, 6081
watch factory, 2071
skill determinants, 495
practice, 2617
social factors, 4342
psychology and, 1568
test, factor analysis, 6090
series, 964
trade education, Germany, 3697
tests, Germany, 3706
training, hypophrenia, 3525, 3557
New York, 3745
pupil-teacher relation, 1634
types, 5012
tramway, examinations, 2609 types, 5012 tramway, examinations, 2609 types, 2640 visual defect and, 3192 woman, 4359 writer, 6614 baritone, 6406 writer, 6614
Voice, baritone, 6496
body irradiation, 3116
child, monotone, 3619
cords, activity analysis, 3114
length, 5475 closing time, 5463 disorder, 1573, 5470 identification, 1553 key, 2211 loss, hysterical, recovery, 1925 muscles and, 438 own, hearing of, 4885 pitch change, 3059, 4231 boy, 2009 review, 5395 singing, child, 5425 timbre discrimination, 6511 singing, child, \$425
timbre discrimination, 6511
trachea resonance, 4267
training, 6002
deaf, 6514
tremolo, vibrato vs., 419
vibration, artificial larynx and, 901
(see also Larynx)
Volition, army, 923, 928
brain lesion and, 827
conditioning and, 1228
effort and, 5241
emotion and, 776
imagination and, 4467
motive and, 776
personality and, 364
physiological activity and, 3476
response, disinhibition, 4636
Schopenhauer's concept, 4672
success and, 804
theory, 737
thought, personality, 805
training, hypophrenia, 6099
Vowel analysis, 452, 3630, 4269, 5463
intensity, pitch, 2019
length, 4913
properties, 6501
quality, 1987 properties, 6501 quality, 1987

theory, 372, 390 Waking, disturbance, 232 sensation, 1153 (see also Sleep) Walking, see Locomotion War attitudes, 2014 character effect, 5389 determinants, 417 character effect, 389
determinants, 417
education against, 3634
psychosis, treatment, 3587
social psychology, 5401, 5438
(see also Military)
Weaning reactions, 3765
Weather, audition and, 1808
comfort and, 2887
leucocytes and, 230
psychology and, 2048
Weight, body, perception, 1809
discrimination, 94, 1138, 2300, 3370
attitude, 1160, 3905
frequency, 691
rat, 3009, 3927
illusion, hypophrenia, 2442
index numbers, 5666
predictive, 608 predictive, 608 Welfare, income and, 6041 Welfare, income and, 6041
Wetness, sensation, 4570
Whole vs. part, see Practice distribution
Will, see Testament, Volition
Wish, duty vs., development, 340
woman student, 3611
Wit, see Humor
Witchcraft, see Magic
Woman, alcoholic, personality, 2958
attitude toward, Germany, 2553
beauty, marriage, scholarship, 4880
castration psychosis, 5906
college, celibacy, 2570
fertility and intelligence, 6547
mental hygiene, 1493 mental hygiene, 1493 vocational adjustment, 3747 crime, Germany, 472 habitual, 911 treatment, 6559 drug addiction, 5935 fertility motive, 2685 drug addiction, 3935
fertility motive, 2685
hormone and sleep loss, 1876
primitive, 4936
psychology, 6040
sex delinquency laws, 4951
rights, 373
student, objectives, 2686
wish, 3611
super-ego, 1358
vocational guidance, 4359, 5578
work, muscular, 5228
(see also Girl)
Word association, 3421
child, 985
Gestalt and, 5815
oxygen lack and, 5811
blindness, 3014, 5553
congenital, 6456
(see also Reading disability) congenital, 6456
(see also Reading disability)
frequency, 2580
meanings, 411
pronunciation test, college, 3073
recognition speed, 938
taboo, college, 4241, 4264
(see also Vocabulary)
Work ability, cataract and, 5516
determinants, 3146
hysteria, 4097
performance and, 5875 performance and, 5875 tests, 6581 acidity and, 205 adrenal cortex and, 2918 attitude, 4305 attitude, 4305
metabolism and, 741
assignment, 1607
blood content and, 4689, 5853, 6298
pressure and, 5883
chronaxy change, 2386
conditioning and, 3936
decrement instruction effect, 199 decrement, instruction effect, 199 meaning and, 2927 measurement, 1866 depressed patients, 4074 description criteria, 5511 efficiency, handedness and, 744 factors, 4700 fatigue in, 796 galvanic reflex in, 4728 girl, 3695

SUBJECT INDEX

heart rate and, 6300 illumination, 5795 mental, brain potentials, 1772 character and, 6598 correlates, 197 distraction and, 5207 mental hygiene, 5566 variability, 1851 metabolism, 1270, 4483, 4730 muscular, woman, 5228 noise and, 1284 oxygen and, 5254 physiology, review, 5831 potassium loss, 2365 psychology, 2605 repetitive, age and, 6346
respiration and, 2369, 6318
circulation, 6297
sugar and, 2353
rhythm, 4669
group, 2891
imposed, 209, 6064
temperature and, 4707, 5868, 5869, 5870
tension, anticipatory, 1292
therapy, 1393, 1440, 1904, 4069, 4154
problem child, 5069
schizophrenia, 4803, 5376
threshold and, 2285, 5743
training, 6597
institutional, 1628

type, tests, 6596
urine excretion and, 5260
will and, 5241
(see also Fatigue)
Worm, food reaction, 1331
light reaction, 1113, 1169, 4596, 4600
regeneration, 739
respiration, 1287
touch reaction, 3486, 5164
turbellarian, nerve control, 656
Worry, see Anxiety
Writing, see Handwriting

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Yoga, 1895 Youth, see Adolescence

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- L'Année psychologique. (Ed) Piéron, H. (Pub) Paris:
- Bibliographia eugenica. (Eds) Davenport, C. B., Laughlin, H. H., & Steggerda, M. (Pub) Cold Spring Harbor, Long Island, N. Y.: Eugenics Res. Asso. (Suppl. to Eugenical News.)
- Bibliographia evolutionis. Paris. (Suppl. to Bull. Biol. de la France et de la Belgique.)
- Bibliographia zoologica. Zurich: Concilium Bibliographicum, (Suppl. to Zool. Anzeiger.)
- Bibliographie der Philosophie und Psychologie. Leipzig: Heims.
- Bibliographie der Sozialwissenschaften. (Ed) Statist. Reichsamt. (Pub) Berlin: Hobbing.
- Bibliographie scientifique française. (Section 2, sciences naturelles et biologiques.) (Ed) Commission du repertoire de bibl. sci. (Pub) Paris: Gauthier-Villars.
- Biological abstracts. (Ed) Schramm, J. R. (Pub) Philadelphia: Union of American Biological Societies, Univ. of Pennsylvania.

- Child development abstracts and bibliography. (Ed) Blumberg, H. (Pub) Washington: Committee on Child Development, National Research Council.
- International index to periodicals. (Ed) Muench, A. F. (Pub) New York: Wilson.
- New international yearbook (article Psychology). (Ed)
 Wade, H. T. (Pub) New York: Dodd, Mead.
- Physiological abstracts. (Ed) Mellanby, J. (Pub) London: Lewis.
- Quarterly cumulative index medicus. (Eds) Fishbein, M., Hutchins, M., Ashburn, P. M., & Allemann, A. (Pub) Chicago: American Medical Association.
- U. S. Bureau of Education. Monthly record of current educational publications. (Ed) McCabe, M. R. (Pub) Washington: Gov't Printing Office.
- U. S. Surgeon General's Office. Index-catalogue of the library. (Ed) Ashburn, P. M. (Pub) Washington: Gov't Printing Office.
- Zentralblatt für die gesamte Neurologie und Psychiatrie. (Ed) Hirschfeld, R. (Pub) Berlin: Springer.

SUBJECT INDEX

heart rate and, 6300 illumination, 5795 mental, brain potentials, 1772 character and, 6598 correlates, 197 distraction and, 5207 mental hygiene, 5566 variability, 1851 metabolism, 1270, 4483, 4730 muscular, woman, 5228 noise and, 1284 oxygen and, 5254 physiology, review, 5831 potassium loss, 2365 psychology, 2605

repetitive, age and, 6346
respiration and, 2369, 6318
circulation, 6297
sugar and, 2353
rhythm, 4669
group, 2891
imposed, 209, 6064
temperature and, 4707, 5868, 5869, 5870
tension, anticipatory, 1292
therapy, 1393, 1440, 1904, 4069, 4154
problem child, 5069
achizophrenia, 4803, 5376
threshold and, 2285, 5743
training, 6597
institutional, 1628

type, tests, 6596
urine excretion and, 5260
will and, 5241
(see also Fatigue)
Worm, food reaction, 1331
light reaction, 1113, 1169, 4596, 4600
regeneration, 739
respiration, 1287
touch reaction, 3486, 5164
turbellarian, nerve control, 656
Worry, see Anxiety
Writing, see Handwriting Yoga, 1895 Youth, see Adolescence

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ADDITIONAL BIBLIOGRAPHIC SOURCES

- L'Année psychologique. (Ed) Piéron, H. (Pub) Paris:
- Bibliographia eugenica. (Eds) Davenport, C. B., Laughlin, H. H., & Steggerda, M. (Pub) Cold Spring Harbor, Long Island, N. Y.: Eugenics Res. Asso. (Suppl. to Eugenical News.)
- Bibliographia evolutionis. Paris. (Suppl. to Bull. Biol. de la France et de la Belgique.)
- Bibliographia zoologica. Zurich: Concilium Bibliographicum. (Suppl. to Zool. Anzeiger.)
- Bibliographie der Philosophie und Psychologie. Leipzig: Heims.
- Bibliographie der Sozialwissenschaften, (Ed) Statist. Reichsamt, (Pub) Berlin: Hobbing,
- Bibliographie scientifique française. (Section 2, sciences naturelles et biologiques.) (Ed) Commission du repertoire de bibl. sci. (Pub) Paris: Gauthier-Villars.
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- U. S. Bureau of Education. Monthly record of current educational publications. (Ed) McCabe, M. R. (Pub) Washington: Gov't Printing Office.
- U. S. Surgeon General's Office. Index-catalogue of the library. (Ed) Ashburn, P. M. (Pub) Washington: Gov't Printing Office.
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